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BETWEEN THE RIVER AND THE PAMPA:

A CONTEXTUAL APPROACH TO THE ROCK ART OF THE NASCA VALLEY

(GRANDE RIVER SYSTEM, DEPARTMENT OF ICA, PERU)

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(GRANDE RIVER SYSTEM, DEPARTMENT OF ICA, PERU)

by

Ana Cecilia Nieves, B.A.; M.A.

Dissertation

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To my parents, Cuqui & Raúl,
and to my husband, Merchant,
and to our children, Sebastián Mallku & Nina Chaska.

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This dissertation applies the contextual approach, as outlined by Patrick Carmichael, to the rock art of the Nasca Valley (Grande River System, Department of Ica, Peru). This approach uses different sources of information so as to construct a basic, indigenous framework within which to view and interpret the subject matter of an art object for which there is no written information due to its age. In this dissertation, I used information about the local environment and archaeology, as well as the art historical methods of formal and iconographic analyses. Comparative information was provided through ethnographic analogy to Andean myths and practices. Data for this study was gathered in a rock art survey that was carried out during the spring of 2000. This survey

covered the lower part of the Nasca valley, downriver from the site of Cahuachi and southwest from the Nasca Pampa, site of the greatest concentration of geoglyphs in the south coast.

Information about the location, orientation, and the relationship to archaeological and natural features, gathered in the survey, are examined in order to provide informed hypotheses about Nasca Valley rock art's function and use. The study reveals that rock art sites may have marked points of transition in the natural and cultural landscape. A concern for water is also suggested by the location and orientation of the rock art, and petroglyphs that display evidence of liquid pouring may also relate to local water sources.

Using a study of form and iconography, rock art motifs in the Grande River System are separated into types and groups according to similarities to datable, portable art and to geoglyphs, providing a tentative time frame for their making. In the Nasca Valley, one period of petroglyph making activity is contemporary to Paracas Cavernas and another dates to the Early Intermediate Period (Nasca). On the upper valleys such as Palpa, Aja, and Santa Cruz, petroglyph-making activity seems to be largely associated to Paracas Necropolis and there does not seem to be Nasca rock art at those locations.

With this contextual information at hand, I provide a re-evaluation of the Nasca Mythical Killer Whale motif, which is depicted in two Nasca Valley rock art sites. I propose using a new name for this motif: The Aquatic Composite Being. The location and iconography of this motif's petroglyphs provide additional information that contributes to our understanding of the meaning of this motif in Nasca art.

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Introduction to the Problem and Objectives

Although there has been a proliferation of research that focuses on the artistic media of textiles, ceramics, and geoglyphs in the Peruvian south coast (Fig. 1.1), relatively little attention has been paid to the rock art of this area. Petroglyph and pictograph concentrations are known to exist in south coast valleys (See Núñez Jiménez 1986), and yet these have been largely left out of reconstructions of the region's cultural history.

There may be several reasons for the omission of rock art in south coast studies. First, the sample may not have been considered large enough, since not many sites have been officially reported or documented. Systematic settlement pattern surveys of the area to be addressed in this dissertation are relatively recent. Little has been published, although fortunately this is changing. Second, rock art is notoriously difficult to date. Although the same reason has not limited the amount of work and attention paid to the area's geoglyphs, perhaps some scholars are reluctant to work with an art form that they cannot securely place into a time frame. Third, rock art cannot be part of museum collections, making it less accessible. And, finally, its appearance is less refined in contrast to the colorful ceramics and textiles of ancient south coast cultures, making it less appealing to scholars and aficionados alike.

With this dissertation, I intend to bring rock art into the discussion of the ancient civilizations of the Peruvian south coast. The objectives of my research are twofold: First, to assemble a corpus of data through a rock art survey of the Nasca Valley. And second, to contextualize this corpus through the analysis of different aspects of these rock art sites: the natural landscape, related archaeological remains, and the form and iconography of the images. Additionally, when correlations or patterns could be determined from such analyses, comparisons to ethnographic information were used to determine whether these patterns fit into known, indigenous beliefs or practices.

Research Hypothesis

The idea for this research began while I was working with Donald Proulx in a survey of the lower Nasca and Grande Valleys (Fig. 1.1). At that time we encountered a few rock art locations. Being familiar with the site of Chichictara in the Palpa Valley, I suspected that, like those rock art sites in Proulx's survey, there could be more sites that have been overlooked by previous researchers in the Nasca region. The recurrence of motifs at Chichictara suggested a local tradition of rock art, specifically petroglyphs. At the same time, the rock art documented in Proulx's survey was definitely early Nasca, while Chichictara was generally believed to be an earlier site, possibly Paracas. My working hypothesis at the inception of this project was that rock art sites found in the Nasca Valley would span from the Early Horizon to the Early Intermediate Period. This would be consistent with the findings at Chichictara and at Proulx's survey sites. I also believed that, like the sites documented in the Proulx survey, location would be significant to other Nasca Valley sites. They would likely also be located among

possible routes between portions of the Nasca valley and between the valley and the adjacent *pampas*, or flat stretches of desert.

The Contextual Approach and Rock Art

Interpreting the art of a society that has no writing system[1] is a problematic endeavor for any art historian. The name of the field- art history- implies the existence of writing, and the field itself has always relied heavily on text for the interpretation of the image. The further removed an object is chronologically, the more complicated its interpretation and analysis becomes, as there may not be any information at all about the object's makers. In the Andean area, interpretations of ancient objects and images are sometimes based on post-contact sources (See Donnan and McClelland 1979; Hocquenghem 1989; Zuidema 1972 inter alia). These interpretations often draw sharp criticism (For example, see Proulx 1989: 146-147) due to the dramatic cultural changes that took place between pre-Inca and Inca societies as well as at the time of European contact.

An alternative methodology was outlined by Patrick Carmichael (1990; 1994), under the name of contextual synthesis or contextual approach. According to Carmichael, this approach

> draws upon all possible sources of information (local environment, archaeology, art history, ethnography, and ethnohistory) to develop an indigenous context within which to view the subject matter. This approach has been applied in varying degrees in south coast studies, and has proved useful because it places the research question within a native framework, as opposed to a Eurocentric framework of analysis. It should not be confused with a direct historical approach

[1] I avoid using terms such as "illiterate," "non-literate," or "pre-literate" due to the negative associations or "evolutionary expectations" (Boone and Mignolo 1994) that these terms imply.

> which traces customs and traits in a direct, lineal fashion from the historic period back to its earliest antecedents … The contextual approach seeks to create a broad framework within which interpretations may be seen to be consistent or inconsistent with indigenous traditions. (Carmichael 1990: 187)

The proposed function and meaning of an art object is therefore ultimately suggested after approaching the object from various angles, by employing methods that belong to various fields, and by asking different questions about it. Although building a contextual framework within which to interpret an object or image is not a novel idea in and of itself, Carmichael clearly sought to move away from any direct connections between pre-Hispanic material and post-contact sources with this methodology.

Carmichael's contextual approach still poses a danger of circularity in the arguments presented. When dealing with an ancient society without writing, later ethnography should only fine-tune an already existing framework based on the data provided by archaeology, art history and the analysis of setting and environment through the natural sciences (Steve Bourget, personal communication). Applying ethnographic data before this framework has been established successfully creates *a priori* assumptions that could ultimately lead to a circular argument, or may imply a direct connection between unrelated cultures and practices. This is particularly true if there is proof of dramatic cultural changes in the history of the area of research, as is the case of the south coast of Peru.

Rock art is an ideal medium for the application of a contextual approach since the work usually remains in its original location. This approach would therefore begin with Data Collecting (Fig. 1.2), which documents the available material in order to develop a Corpus of Investigation.

The next step would focus on situating the rock art in a chronological framework. Through comparisons of form and iconography, some examples of rock art can be dated. A historical context may therefore be established for the rock art as these dates are determined. Through the use of stylistic and iconographic description, this stage involves the field of art history. Comparative material is provided by archaeology.

A study of site location is the next step in the analysis of the rock art. This includes information about the area's characteristics, the landscape, and related archaeological remains. Additionally, the internal arrangement of the sites can also be studied. This includes information about how the petroglyphs and pictographs are displayed in each site and how they relate to each other. Important natural and cultural features may also stand out as they relate to rock art site locations. The fields that inform this stage of the analysis are therefore the natural sciences and archaeology.

The last step involves interpretations based on the information mentioned above. This includes interpretations of the locations of sites as well as iconographic analyses. Comparative ethnography enters only at this point as supportive material for the conclusions reached.

Terminology

Some of the terms and spellings that will be used throughout this dissertation need to be defined and explained so as to avoid any possible confusion or misinterpretation.

The two spellings for the word Nasca or Nazca refers to many things in this area: the modern town, the river valley, and the culture from the Early Intermediate Period (1st through 7th century AD). Some scholars such as Clarkson (1985: 23), Aveni (1990: 3)

and Silverman (1993) have used different spellings to distinguish the culture from other geographic features (Nasca for the culture and Nazca for the town and river valley). However, in the interest of consistency and clarity in this dissertation, I will use only one spelling, Nasca. I will clarify within the text whether I am referring to the culture, art style, the river valley, or the modern town. Similarly, in previous scholarship the spellings Huari and Wari have been used to refer to both a Middle Horizon culture and a site. I will here use Wari as the only spelling. My choices of Nasca and Wari as standardized spellings are based in part on the fact that the sounds they describe are more consistent with the sounds of indigenous languages. For example, the Quechua "s" sound is very different from Spanish "z." There is no "–zca" in Quechua and but there are clear "s" sounds (Urioste and Herrero 1955; Salomon and Urioste 1991), making Nasca a more appropriate spelling over Nazca. Additionally, there has been a trend to standardize the spelling of Nasca and Wari in recent scholarship, and recent publications employ no distinctions in spelling between the names of the cultures and locations (For Wari, see Cook 1994; Tulchin 1997; Bergh 1999 inter alia; For Nasca, see Valdez Cárdenas 1998; Conlee 2000; Vaughn 2000 inter alia).

It is important to point out as well that the river referred in some Peruvian maps as Río Grande de Nasca will be simply called Grande River in this dissertation for clarity and to avoid confusion between the Río Nasca (Nasca River) and the Río Grande de Nasca (Grande River). The Nasca River is one of many tributaries of the Grande River. I will elaborate on the characteristics of this particular river system later in this dissertation.

Definitions and clarifications regarding the artistic media discussed in this dissertation are also needed. The term rock art, for example, is an all-encompassing category that includes any artwork on rock surfaces. Whitley (2001: 833) defines rock art as "painted, drawn, engraved, incised, scratched, pecked, or carved images on natural rock landscape surfaces." Bednarik (2001: 202) defines it as any "non-utilitarian anthropic markings on rock surfaces, made by either the additive process (pictogram) or by a reductive process (petroglyph)."

Bednarik also distinguishes between his use of the terms pictogram, which refers to any "rock art motif that involved an additive process in its production" (Bednarik 2001: 201) and pictograph, which he defines as " a writing character of figurative appearance, representing a word or a syllable; a hieroglyph" (Bednarik 2001: 201). Whitley does not equate pictograph with writing at all, since he defines pictograph as "a painted or drawn rock art motif" (Whitley 2001: 832). Given the wide use of the term pictograph to describe any painted rock art motifs (For example, see Brody 1991; Chippindale and Taçon 1998), and the fact that both –graph and –gram can be used to refer to both drawings and writing, I use pictograph to refer to any rock art examples that are made through an additive process (paint on rock surface), but do not imply the existence of a writing system when using this term.

The majority of examples of rock art in this study are petroglyphs, defined by Bednarik as " a rock art motif that involved a reductive process in its production, such as percussion or abrasion" (Bednarik 2001: 200) and by Whitley as "an engraved, incised, pecked, carved, or scratched rock art motif" (Whitley 2001: 832).

In this dissertation, I also use the term "engraving" to describe some petroglyphs. Some scholars oppose the use of the term engraving when referring to rock art, as this technique should refer to the removal of mass with the use of a burin or graver (Bednarik 2001: 4). I used it here however in its most basic definition, meaning "to grave" or carve into a surface. This engraving or carving stands in contrast to lighter pecking or scratching.

Any location with one or more examples of rock art is referred to here as a rock art site. These vary in size considerably, from single boulders with a few engraved lines to clusters of boulders covered with multiple representational petroglyphs and pictographs. The rock art to be discussed here was found primarily on boulders, or large, rolled stones, all of which are sedimentary. These boulders can be found on hillsides and in the bases of wide, dry streambeds.

Rock art has also been found in my survey as panels. A rock art panel is defined as a "natural rock cleavage plain or surface, and the rock art thereon" (Whitley 2001: 832). In the survey area these consist of exposed sandstone strata on hillsides. Such is the case of site QMA01 (Proulx's site RN-49) where, due to centuries of erosion, there are relatively flat sandstone panels that have been covered with petroglyphs.

Given the connections between rock art and geoglyphs, which will be discussed throughout this dissertation, a working definition of geoglyph is also necessary. Whitley defines a geoglyph as "an earth figure, usually monumental in scale" (Whitley 2001: 828) and an earth figure as "imagery created on the groundsurface; usually monumental in scale" (Whitley 2001: 828) although he does not specify a size range that would qualify

as monumental. Besides their size, Whitley also makes a distinction between rock art and geoglyphs based on the techniques employed (Whitley 2001: 39) since geoglyphs are not made through the processes of carving, engraving, incising, scratching or pecking.

Bednarik is more specific as to the size of geoglyphs. He defines a geoglyph as "a large motif (usually <4 m) or design produced on the ground, either by arranging clasts (positive geoglyph, stone arrangement/alignment, petroform, earth mound) or by removing patinated clasts to expose unpatinated ground (negative geoglyph)" (Bednarik 2001: 197). A clast is defined as "a fragment of rock of any size, but used especially to denote cobble-sized angular breakdown debris; synonymous to detritus" (Bednarik 2001: 195). And finally, he defines petroform as "a geoglyph consisting of clasts placed on the ground to form a motif" (Bednarik 2001: 200).

Although one tends to assume that the primary difference between these two art forms is in their scale, some particularly large petroglyphs, and, conversely, some very small geoglyphs, found in the Nasca valley complicate the distinction between these two art forms based on size alone.[2] I would propose an alternative definition for geoglyph or ground drawing: A geoglyph consists of any image or design made by altering the appearance of the ground through the manipulation of the soil, rocks, or clasts on its surface. This is achieved through an additive technique (by piling earth or rocks, aligning rocks, etc) or a subtractive technique (by removing soil or rocks from the surface of the

[2] For example, see the petroforms in QMC03, described in Appendix B. These are well under 4m long and yet are clearly geoglyphs.

ground).[3] I also include within the definition of geoglyphs, all cleared areas and simple lines, along side representational or geometric designs. Cleared or cleaned out areas, usually rectangular, are called *campos aclarados* or *campos barridos* in this dissertation.

It is important to point out that Bednarik's use of the terms positive and negative geoglyphs is in direct opposition to the terminology used in some of the scholarship of the Nasca Lines. Orefici, for example, refers to any geoglyph made by piling stones to create a dark shape, with cleared, lighter areas around it, as a "negative" geoglyph (Orefici 1993: 164). This would constitute an additive technique in the creation of the shape (although with a subtractive component through the clearing of the exterior of the figure). When discussing such geoglyphs, I will try to be as clear as possible as to the techniques employed so as to avoid any possible problems caused by the discrepancies in these definitions.

Outline of this Study

Part II of this dissertation provides a brief background of the area and my research. I will first look at the environmental setting of the Grande River System in Chapter 2. Chapter 3 provides an outline of the major civilizations and art styles from the Pre-Ceramic to the Late Horizon. Chapter 4 evaluates the previous research on Grande River System rock art and geoglyphs. Finally, in Chapter 5, I describe the goals and procedures involved in my rock art survey during the first part of 2000.

[3] These terms are borrowed directly from sculpture terminology and have been also used by south coast scholars such as Silverman and Proulx (2002: 171-172) in reference to geoglyphs.

Part III of this dissertation places the Nasca rock art sites in time and place. Chapter 6 is a proposal for a typology and chronology of Grande River System rock art motifs. The data combines the information gathered in my survey with known rock art sites in adjacent valleys. Chapter 7 defines patterns that are observed in the distibution of Nasca Valley rock art sites. The iconography of the sites is compared to datable material in surrounding areas. Chapter 8 addresses the transitional quality of Nasca valley rock art site locations.

Part IV deals with the iconography of Nasca Valley rock art. I chose one motif, the Nasca Mythical Killer Whale, and analyzed it in detail in Chapter 9. All of the information from the previous chapters further helps contextualize this particular motif. The resulting interpretation of the motif helps clarify the meaning of this motif in depictions in other media. Furthermore, I propose a different name for this motif: The Aquatic Composite Being.

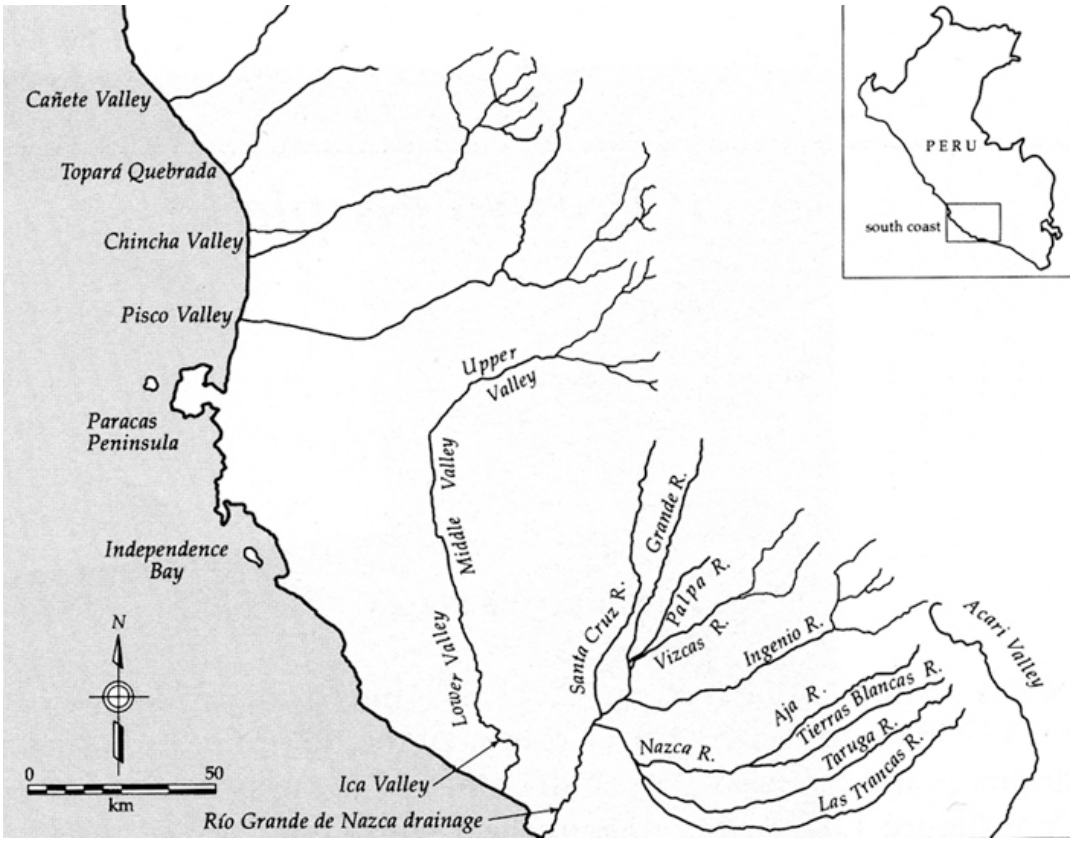

Figure 1.1: Map of South Coast Valleys (Silverman and Proulx 2002: Fig. 1.1)

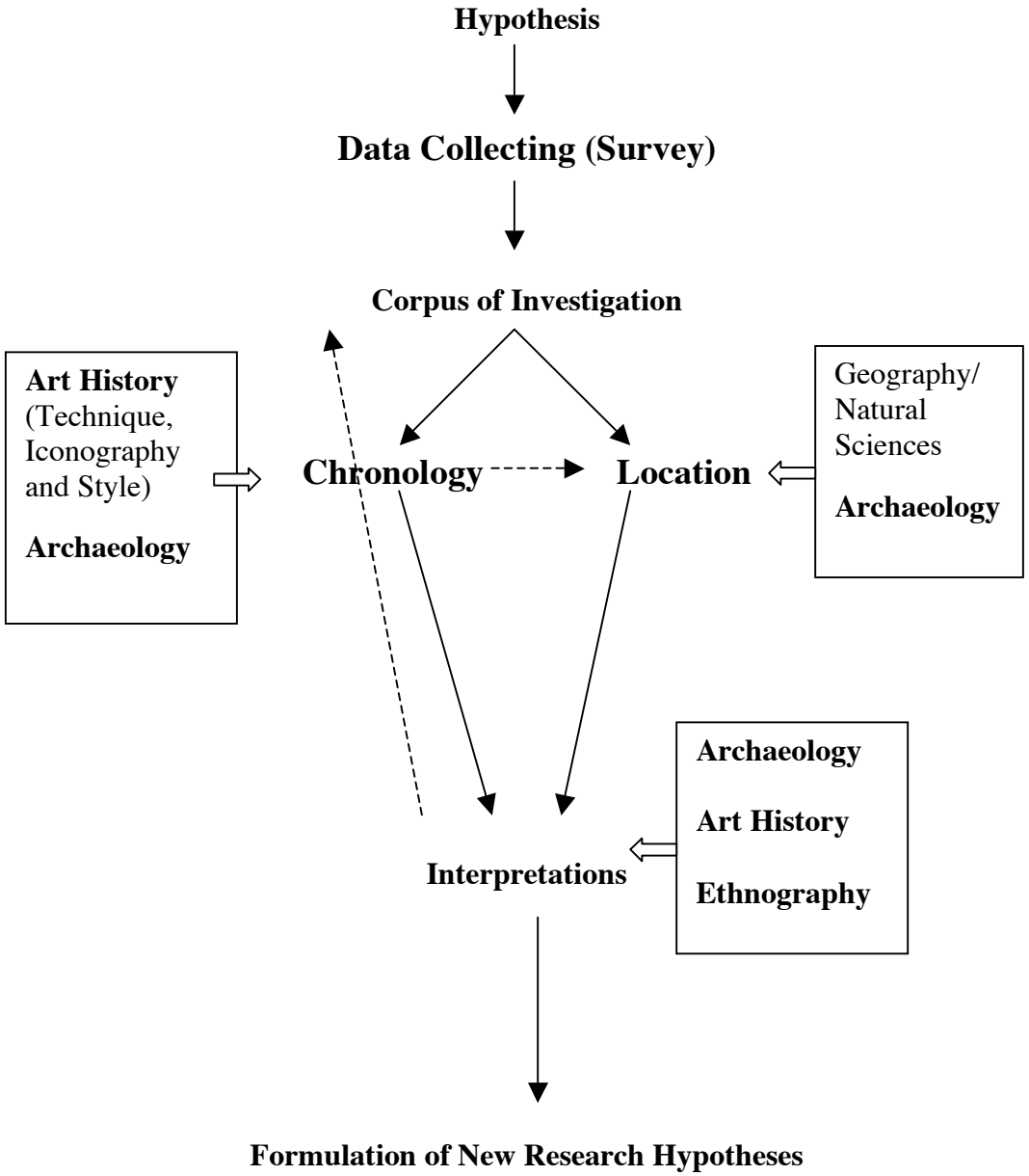

Figure 1.2: Model of Contextual Approach used in this dissertation. Based on Steve Bourget's Interactive Model of the Methodological Approach (personal communication)

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CHAPTER 2 : ENVIRONMENTAL SETTING

Working within the field of ecological ethnography, Roy Rappaport (1979: 97-144) proposed that scholarly work focusing on a particular group's relationship to its environment should consider both an operational and a cognized model. While the operational model should provide an etic understanding of the environment, i.e. the environment described as accurately as science allows it, the cognized model provides an emic understanding of the environment through an analysis of a group's beliefs regarding it. Given the intimate ties of rock art to its environment, as site-specific artwork, it is essential to provide a detailed description of the local environment. In this chapter, I focus exclusively on the operational model, attempting to provide an etic understanding of the topography, climate, water availability, and geology of the Nasca and adjacent valleys.[4] It is important to remember that this is a description largely based on the setting and landscape as it is today. However, although weather patterns do change, it is unlikely that they have changed so much to make this data useless. For example, archaeological evidence indicates that the problems with water availability that will be discussed here were as common in ancient times as they are now. An attempt to provide an emic understanding of some aspects of the landscape is found in later chapters.

[4] The information in this section comes primarily out of the evaluation of natural resources by a Peruvian government organization called Oficina Nacional de Evaluación de Recursos Naturales , or ONERN. The goal of the ONERN project was to investigate the problems of agricultural productivity in the area as well as to study water use and availability in order to create a development program for the area (ONERN 1971).

Geographic Location and Topography

The surveyed area is part of the Grande River System, located in the Department of Ica in coastal Peru. The Peruvian coast is a narrow, dry strip of land, between the Pacific shore and the Andes Mountains, cut by rivers that flow to the west. Despite all of these rivers, only 10% of the Peruvian coastal surface lends itself to agricultural use (ONERN 1971: 7).

The Grande River System is characterized by valleys that cut through large, flat expanses of land. David A. Robinson described the formation of this landscape as follows:

> In the geologic past, the Nazca valley was once part of a large bay which, when uplifted, left a relatively flat, sandy area. Since that time, rivers flowing down from the Andes into the sea cut into this flat area, forming small valleys. In an aerial view, these river courses appear as a series of gorges cutting across a level plain (Robinson 1957: 7)

The rivers that make up the gorges in this river system are (from north to south) Santa Cruz, Grande, Palpa, Vizcas, Ingenio, Nasca (and the Aja and Tierras Blancas Rivers which join to make the Nasca), Taruga, and Las Trancas (Fig. 1.1).

The level plain mentioned by Robinson is the series of *pampas* (such as the Pampa Cinco Cruces, Pampa Majuelos, and Pampa de Atarco) that lie between river valleys. The term *pampa*, which means "flat" in Quechua, is used to refer to all flat stretches of desert. The rivers mentioned here cut into the *pampas* creating the valleys. The *pampas* to the northeast of the Nasca valley, between the Ingenio and Nasca Rivers, such as the Pampa de Majuelos or the Pampa San Jose, are best known for the abundance of geoglyphs on their surface. These geoglyphs are popularly known as the Nasca Lines.

Following Aveni (1990: 3) I refer collectively to this particular group of *pampas* between the Nasca and Ingenio Rivers as the Nasca Pampa (Fig. 2.1 and Fig. 2.2), since this whole area is simply called *la pampa* by modern *nasqueños*.

The petroglyph survey was conducted in the lower Nasca valley, between 174 and 400 meters above sea level. The area is downriver from the sites of Cahuachi and Estaqueria, and closer to the union of the Nasca River and Grande River, where the Nasca River flows to the northwest. Low hills and *quebradas* flank the Nasca Valley on both sides (Fig. 2.3). *Quebradas* are "shallow streambeds and gullies that have lain dry for centuries" (Aveni 2000: 25). These are much wider and larger on the northeast side of the valley, however, where they cut into the Nasca Pampa (see Fig. 2.4). *Quebradas* do not have any evidence of habitation or agriculture although many of the rock art sites discussed in this dissertation are located well within *quebradas*.

Close to the confluence of the Nasca River and Grande River, near the area of Cerro Colorado, the valley becomes narrower and the flanking hills very steep, making it difficult and impractical to cross from one valley to another near this area despite the short distance.

Climate

The coastal climate in general is dry during the summers and moist and foggy in the winters. A barrier of mountains to the west of the Nasca area prevents the moist air from the sea from entering the area surveyed, resulting in the typical Nasca area climate characterized by warmth and dryness. Temperatures in the Grande River System range from an average temperature of 25.4°C in February to an average temperature of 16.3°C

in July, while extreme high temperatures can reach 32°C in the summer. Relative humidity averages between 61-69% (ONERN 1971: 49).

Water Availability

Although water was involved in the making of the Grande River System, there is little surface water in the area now. Water availability was and still is a major concern for the inhabitants of this area. Of the rivers in the Grande River System, the ONERN only uses the term "agricultural valleys" to refer to the Grande, Ingenio, Palpa, Viscas and Nasca Rivers. The rest of the rivers' water supply is too limited and irregular (ONERN 1971: 181). With the exception of the Grande and Ingenio Rivers, however, all of the rivers from this drainage are dry for an average of 8 months a year (ONERN 1971: 182). Fluvial water tends to be available during the rainy season, which spans from January through March. During this period, the rainfall in the mountains to the east provides the water for these rivers. Pluvial precipitation in the Grande River System itself, however, can be as little as 3.3 mm annually and as high as 125 mm on the easternmost areas where the elevation is higher (ONERN 1971: III, 55).

The lack of surface water in the Grande River System is also due to filtration and evaporation (ONERN 1971: 181). In the Nasca Valley, fluvial water occasionally disappears below ground level, as was noted by Silverman (1993: 9-10).

Ancient and modern inhabitants of these valleys have had to tap into subterranean water resources to compensate for the irregularity or downright unavailability of water. By 1971 there were 583 wells throughout the Grande River System, 250 of which were located in the Nasca valley (ONERN 1971: 201). Underground water can be as deep as

35 meters below ground level, although sometimes this water seeps to the surface as springs, especially in the westernmost areas of the drainage (ONERN 1971: 205). According to the ONERN report (1971: 205), the water table intersects the surface of the ground at locations such as Jumana, Estaquería, Corralones, Cahuachi, Tunga, and Mancha Verde.

Ancient Nasca area inhabitants also tapped into subsurface water by building aqueducts and filtration galleries or *puquios*.[5] These consisted of subterranean canals that penetrated the earth horizontally until they intercepted the water table, which is parallel to the ground surface (Schreiber and Lancho Rojas 1988: 52). The canal served as a filtration gallery for this subterranean water (González García 1978: 135), and it directed it to a *cocha*, or lake (actually a man-made reservoir), where the water was collected. This collected water was subsequently redirected and used for irrigation. The advantage of these filtration galleries is that they were and still are a more reliable source of water than that of the river. Although it is difficult to date these structures, Shreiber and Lancho (Schreiber and Lancho Rojas 1988) proposed a middle Nasca date for them, probably around Nasca 5 (c. 500AD) based on settlement patterns. This period would have also coincided with a drought that affected a large portion of the south coast, as well as with a dramatic change in the Nasca artistic style that may have been a reflection of ideological and religious changes taking place at the time (Blagg 1975).

[5] As Shreiber and Lancho (1988) correctly pointed out, the term *puquio* is a Quechua word that refers to a natural spring. Aqueduct or filtration gallery is a better term for this type of structure.

Unfortunately, however, the scarcity of water has not been the only problem for ancient and modern farmers. This area is also characterized by a high salt content in the soil (ONERN 1971: 3, 150), which is damaging for crops as the salt makes its way to the surface during irrigation making the earth infertile.

El Niño Phenomenon or ENSO (El Niño and the Southern Oscillation)

While water is rare and much needed in the coastal deserts of Peru, it can also be destructive and feared. The periodic phenomenon known as an El Niño event, or ENSO (El Niño and the Southern Oscillation), brings torrential rains and floods to the Peruvian coast as well as droughts in the highlands (Moseley 2001: 28). This phenomenon involves the displacement of warm waters from Ecuador to northern Peru, and in rare cases as far south as Pisco, in the Department of Ica, during the summer months. It is likely to have acquired the name of El Niño (The Child) in the nineteenth century (CONCYTEC 1985: 9) because it usually occurred around Christmas time.

Because of the south to north flow of the Humboldt Current, the waters off the Peruvian coast are usually cold. The difference in temperature and salt content from the ENSO displaced waters often brings about dramatic climate changes. According to a CONCYTEC report:

> …aside from the physical changes that take place in the ocean, there are also important metereological changes (rains, storms, strong winds), landslides caused by these [metereological changes], the appearance of interesting vegetation in the desert areas of the coast, the death of many fishes and marine birds, [and] the increase of water volume in the rivers along with the dangers that this brings (CONCYTEC 1985: 10-11)

Historically, the changes in the weather patterns caused by this phenomenon have been recorded. Surviving pre-contact myths and post-contact written records allude to the

destruction by water, likely to be references to the El Niño phenomenon (Rostworowski 2001). In one case, a colonial town in the Peruvian north coast was completely flooded and largely destroyed (Hampe 2001). Additionally, there is archaeological evidence that such catastrophic events also dramatically affected prehispanic groups throughout the Andean area and may be related to elaborate ritual practices (See for example, Bourget 2001a and 2001b).

Vegetation

The predominant type of vegetation found in the surveyed area consists of trees called *Huarangos* (*Acacia macracantha*). These still grow quite thickly in the Nasca Valley, especially around the area of Jumana. Unfortunately, these *huarangales* are starting to diminish in size due to the burning of these trees for fuel by the Nasca Valley inhabitants as they cannot make a living based on agriculture alone.

Another plant common on the riverbed of the Nasca River is the *Calato* (*Bulnesia retamo*), which gets its name from its lack of leaves. Other small shrubs such as *Saucces* (*Salix humboldtiana*), *Molles* (*Schinus molle*), and *Carrizales* (*Arundo donax*) can be found growing next to and on the riverbed (Sejuro Nanetti 1990; ONERN 1971: 55). Some dry shrubs and trees are sometimes found within the *quebradas*. These are deceptive, according to Clarkson (1985: 6), since although they appear to be dead, they are usually "alive and green on the inside."

Today, farmers in the Grande River System cultivate cotton, grapes, corn, beans, and tubers, among other agricultural products (ONERN 1971: 56). Fruits such as mangos and oranges are now cultivated in the northernmost valleys such as Palpa and Grande,

where more water is available. Ancient inhabitants of this river system cultivated many of the same plants and vegetables, as cotton seeds, coca, manioc, corn cobs, *ají* peppers (*Capsicum sp*.), and beans have been found archaeologically (For example, see Orefici 1993: 106; Towle 1961: 130, 132). Additionally, many plants and vegetables such as beans, corn, *lúcuma* (*Lucuma bifera*), and *ají* peppers are depicted in the very detailed, representational art of the Nasca and Paracas cultures (See Peters 1991; Towle 1961)

Geology

Since the present study focuses on the rock art found on this area's boulders and layers of exposed rock, a word about the geology of this river system is particularly relevant. In the Nasca Valley, hillsides are mostly sandy. River cobbles covered by a dark desert varnish are found on the surface.[6] On the hillsides and inside the *quebradas*, one may find exposed strata of sandstone or broken sandstone boulders. These are the surfaces on which the ancient inhabitants engraved, and to a lesser extent painted, rock art. The type of rock is basically the same in all of these: a very soft,[7] poorly cemented sandstone. For the most part the color of these rocks is a sandy, light brown, much like the surrounding hillsides. However, occasionally, these stones may have a reddish surface coating, which is caused by the exposure of the iron within the rocks to the sun. Petroglyph artists took advantage of this coloration and the contrast that resulted from carving into the rock's surface.

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[6] Some of these cobbles have been removed to expose a lighter soil underneath, creating lines and designs on the earth surface, or geoglyphs.

[7] This softness makes them easy to engrave with simple tools. Unfortunately, because of this, some of the known rock art sites in the Nasca valley have also had their share of destruction and graffiti. Natural phenomena have also contributed to the destruction of some of these petroglyphs through erosion.

In the northeast side of the valley (the side that borders the Nasca Pampa), especially in the central portion of the survey area, fossils are quite common, particularly shellfish and, to a lesser extent, shark teeth. This will be dealt with in more detail when discussing the iconography of the petroglyph sites located in Quebrada Majuelos in Chapter 9.

The Nasca River and the lower Grande River, however, are the only portions of the river system with such soft sandstone. Other valleys of the drainage, east of the survey area, display better cementation. This is the case in the Palpa Valley where rocks, although also sedimentary, are considerably harder and have a coarser grain than those of the Nasca valley. Many of the boulders at the Palpa Valley site of Chichictara also have a bright red surface coloration caused by exposure of the iron, which makes the whiter areas of the engravings stand out in contrast.

In the Santa Cruz valley, the site of La Caseta has very hard sandstone boulders with a thick coat of desert varnish that darkens the rock surface. The desert varnish at La Caseta consists of a dark coat, similar to the desert varnish found on small rocks that cover the Nasca Pampa. In the case of Santa Cruz valley rock art, the petroglyphs are only lightly pecked, just enough to remove the dark desert varnish from the surface. In contrast to the Nasca or Palpa Valley sites, the site in the Santa Cruz Valley also has boulders that have been rounded by water erosion.

The types of rocks found at the Aja Valley sites of Pongo Grande and San Marcos differ tremendously from the Nasca valley sites. The elevation is higher in the Aja Valley, and the surrounding hills and mountains are taller and steeper. This same type of

change in landscape is starting to be visible in Palpa Valley's Chichictara site, where the valley's flanking hills are considerably higher than in the Nasca Valley. At Aja, however, the types of rocks found on the hillsides are igneous, primarily basalt and andesite. These are harder and more angular than any of the rocks in the Nasca Valley or even in the Palpa Valley sites. Aja Valley petroglyphs are, therefore, barely scratched onto these hard surfaces. Some of these rocks also have a high iron content. When the surfaces of these rocks are scratched to make a petroglyph, the rock surface breaks down into a fine powder that weathers and turns red with exposure to the sun. This results in a red image on a light gray surface, as opposed to Nasca and Palpa Valley petroglyphs, which are often light drawings on red backgrounds.

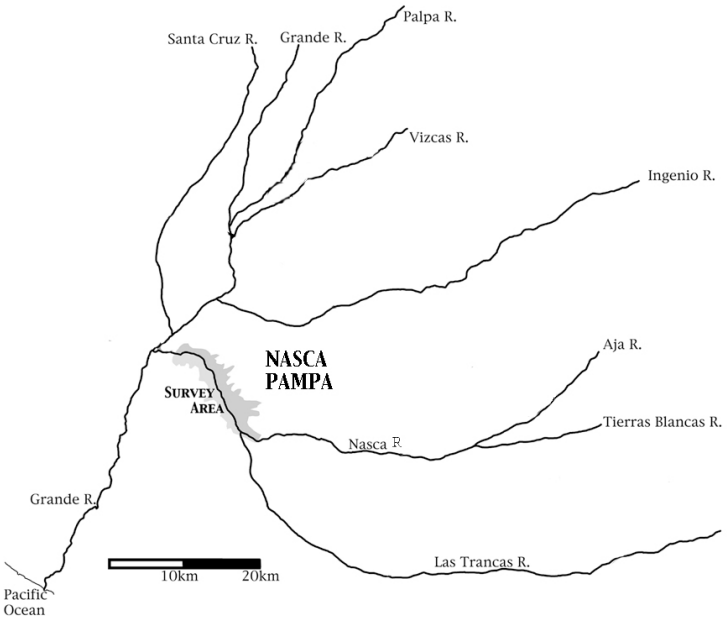

Figure 2.1: Location of Nasca Pampa (*pampas* located between the Nasca and Ingenio Valleys).

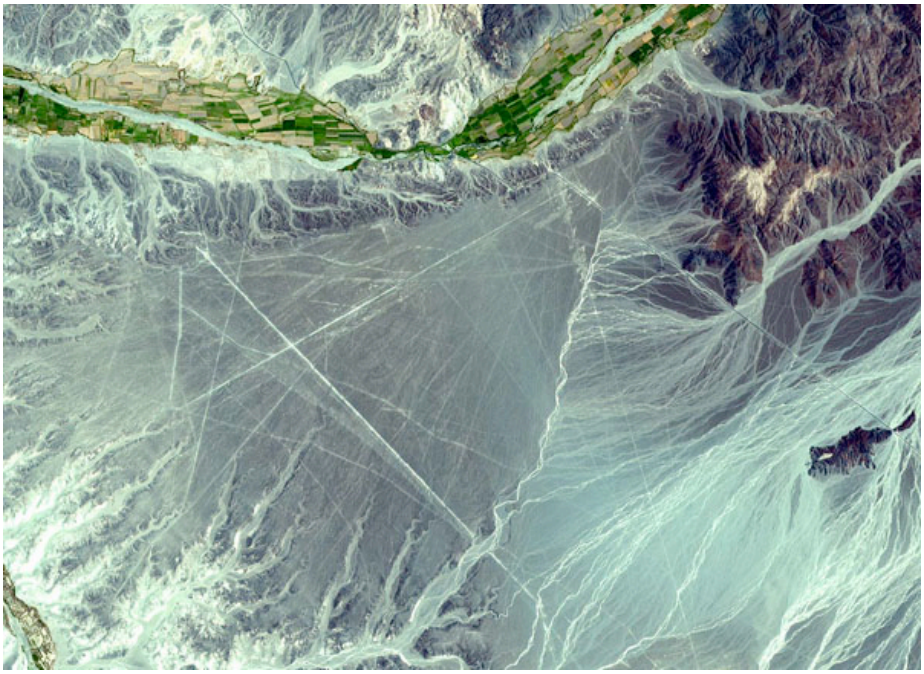

Figure 2.2: Nasca Pampa between Ingenio and Nasca Valleys (NASA/GSFC/METI/ERSDAC/JAROS and U.S./Japan ASTER Science Team 2000)

Figure 2.3: Nasca Valley (photo: Ana Nieves)

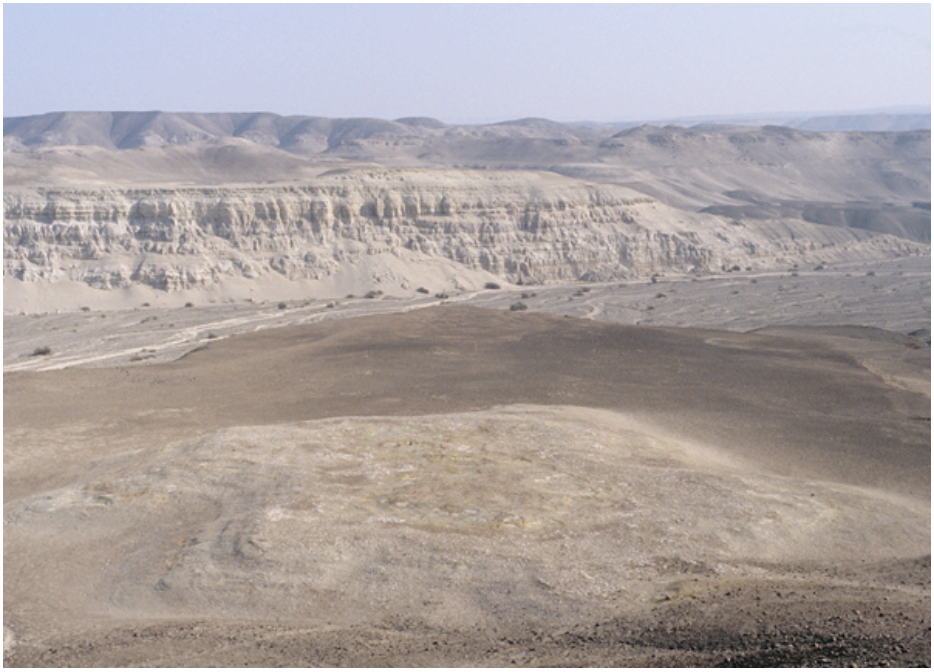

Figure 2.4: Quebrada Majuelos (photo: Ana Nieves)

CHAPTER 3 : PREHISTORY OF THE SOUTH COAST

In the reconstruction of the cultural history of the south coast of Peru, culture has often been equated to artistic style. Differences in the formal qualities of objects, primarily ceramics, throughout time, have been interpreted as distinct cultural phases. At the risk of oversimplifying the complexities of the styles that are found in the area of study, I will here provide a brief outline of the styles that define the cultures that inhabited the Peruvian south coast.

Cultural periods are arranged in the Andean area within a structure of "horizons" and intermediate periods (Fig. 3.1). Horizons are best defined as the expansion of stylistic traits quickly over a large area (Rowe 1960a and 1962). According to Rowe, a horizon reflects a period of "cultural unity, while the existence of many local styles reflects a pattern of cultural diversity" (Rowe 1960a: 627). Rowe used horizons as an organizational tool, arguing that in the Andean area there were three main horizons with intermediate periods of cultural diversity (Rowe 1960a). This sequence is still very much in use today as the standard sequence, refined through archaeological work. The resulting sequence is as follows: the Preceramic Period, the Initial Period, the Early (Chavín) Horizon, the Early Intermediate Period, the Middle (Wari) Horizon, the Late Intermediate Period, and the Late (Inca) Horizon.

The Preceramic Period (9000-1800 BC)

In the Peruvian north coast, central coast, and northern highlands the Preceramic and Initial Periods witnessed far more activity and quite possibly a higher degree of social complexity than is evidenced in the south coast. During the Preceramic Period, monumental architecture was well established in these areas. New evidence indicates that Preceramic Period sites such as Caral in the Supe Valley were actual cities, with craft specialization and social stratification (Shady Solís 2003). This particular city roughly dates to 3000 BC, well before the invention of fired clay objects marked the beginning of the Initial Period in the Peruvian Andes. Preceramic monumental architecture in the coast consisted of pyramidal structures and sunken circular buildings. In the northern highlands, the Preceramic Period is characterized also by monumental architecture and by evidence of elaborate ritual activity. Sites of the Kotosh tradition such as La Galgada, in Ancash, consisted of rooms with a central fire pit that were used and subsequently buried and covered by a new structure (Grieder 1988).

The Formative Period: Initial Period (1800-800 BC) and Early Horizon (8th -1st Century BC)

During the Initial Period in the north coast, an iconographic complex manifested itself in much of the ceramic iconography and architectural sculpture. This complex was characterized by depictions of figures with large fangs or teeth as well as upturned eyes (Burger and Salazar-Burger 1998) such as those seen at the sites of Garagay and Huaca de los Reyes. U-shaped temples became a preferred choice for monumental architecture.

Not much has survived from these two periods in the south coast. The main evidence of activity seems to be the aceramic shell mounds and shell scatters that have

been reported along the shoreline. Such sites have been reported at the Bahia de la Independencia, located by the Paracas peninsula, and by the San Nicolás Bay, located south of the Grande River System (Carmichael 1998; Strong 1957; Vescelius 1963). These sites are small by northern and central coast standards. Archaeological excavations at Cahuachi have also uncovered evidence of a Preceramic Period occupation of this site (Isla Cuadrado 1990).

An Initial Period ceramic style named Disco Verde (100-800BC) was found in the Paracas Peninsula (García Soto and Pinilla Blenke 1995: 46-49), decorated through stamping, negative painting and some post-fire resin painting. Following Disco Verde, another Paracas Peninsula style named Puerto Nuevo has been dated between 800 and 600 BC. Puerto Nuevo is characterized by the use of post-fire resin painted pottery with decorations that consist of geometric, zoomorphic, and anthropomorphic motifs (García Soto and Pinilla Blenke 1995: 49-51).

With the exception of Carmichael (1998), there is little evidence of sites that predate the Early Horizon in recent surveys. Isla, Reindel, and de la Torre (2003: 230) report a few Initial Period sites in the Palpa area as well.

The Early Horizon marks the period in which the style associated with the Chavín culture expanded over much of the Andean area. The Chavín civilization has its origins in the highlands, and their main ceremonial center, Chavín de Huantar, is located in the present day Department of Ancash. Taking much of their iconography from patterns that began in the Initial Period, Chavín iconography is characterized primarily by images of fanged figures with snarling mouths.

Direct evidence of Chavín influence in the south coast comes from a group of textiles collectively known as the Karwa textiles. These were supposedly looted from a site in the Paracas peninsula, although scholars now question their provenance (See Cordy-Collins in Carmichael 1998). The images on these textiles are painted and their iconography includes very distinct representations of a Chavín female staff god, as well as winged figures, caymans, serpents, and felines (for a study of their structure and iconography, see Wallace 1991). Additionally, there are a few petroglyphs in the site of Huancor in Chincha area with chavinoid iconography (Núñez Jiménez 1986: 175,182) as well as a single petroglyph in the Palpa Valley site of Chichictara that has been attributed to Chavín as well due to its "eccentric pupil and snarling, upturned mouth" (Silverman 1991: 374).

Although the dates that mark the beginning of the Early Horizon are debatable, I will use the 8th century BC as the beginning point for the Early Horizon in the south coast, following Paul (1991).

In the south coast, the Early Horizon is associated with at least two artistic manifestations that have been labeled "Paracas." This term is problematic. Paracas could refer to a geographic location (the Paracas peninsula), a culture (or cultures), pottery styles, textile styles, and even a natural phenomenon (sand storms). I will here explain in broad strokes what is meant by Paracas, but I refer the reader to Silverman (1991) and Paul (1991) for more detailed and critical accounts of the Paracas problem.

Part of the confusion of terminology stems from the use of the word Paracas by Julio C. Tello (Tello 1959; Tello and Mejía Xesspe 1979) in reference to what is now

believed to be two distinct (but related) artistic and cultural traditions. During his excavations in the 1920's Tello identified two groups of archaeological remains in the Paracas peninsula, located between the Pisco and Ica Valleys. These groups are Paracas Cavernas and Paracas Necrópolis. The names were used to refer to sites, but also used as labels for the textile and ceramic styles at those sites.

Although there are still questions as to the exact provenance of some of Tello's Paracas Cavernas-style ceramics, most of these are believed to have been excavated at Tello's Cavernas site (Silverman 1991: 356-357) and therefore linked to Cavernas textiles (described below). The Paracas Cavernas style of ceramics encompasses two groups: a negative-painted ceramic decorated with mostly geometric designs, and a polychrome postfire painted ware. The latter used brightly colored resin paint to add color to forms that had been drawn into the pots through incisions. These two styles or ceramic traditions are believed to be contemporary (Silverman 1991: 375).

Menzel, Rowe, and Dawson (1964) used the post-fired, resin painted ceramic material fom the Ica Valley site of Ocucaje to create the basic chronology and seriation for ceramics of the Early Horizon. The Menzel, Rowe, and Dawson seriation (henceforth MRD seriation or Ocucaje sequence) divided the Early Horizon into 10 phases,[8] although the first two phases in the Ocucaje sequence are no longer considered valid. According to Menzel, Rowe, and Dawson, Chavín influence in the south coast is reflected in the imagery of fanged beings on these resin painted pots during phases 3 through 8 of the

[8] Sawyer (1961; 1972) and Massey (1991) group the Paracas material differently and use fewer phases. Additionally, the MRD seriation has been critiqued by Wallace (1985), who believes that some of the phases from the Ocucaje sequence are actually not chronological changes, but geographic differences..

MRD seriation. It is important to point out that this seriation was based primarily on style and form, but archaeological excavation has yet to validate these phases.

Both Ocucaje and Cavernas ceramics share decoration techniques (post-fired resin paint over incised ceramics). However, there are stylistic differences between them (Silverman 1991 Perp: 366). Furthermore, Paracas Cavernas material dates from Early Horizon 7-10 (or EH 7-10) while the Ocucaje material begins during EH3.

The other ceramic style that begins during the Early Horizon is Paracas Necrópolis. Paracas Necrópolis ceramics, now called Topará, are very simple and elegant in comparison to Paracas Cavernas.

> Classic Topará pottery is a carefully shaped, very fine, thin-walled (walls 1.5 mm thin are common), well-fired, monochrome, usually orange ware that is undecorated except for interior pattern burnishing on black smudged bowls (Silverman 1991: 359).

They usually are shaped in the form of gourds and have two spouts. No Chavín influence is evident in Topará ceramics.[9]

The relationship between Paracas Cavernas and Topará is very problematic. Some stratigraphic evidence in the Pisco (Peters 1988: 31) and Chincha (Canziani Amico 1992: 93) valleys indicates later Topará occupation over a Paracas (Cavernas) one. However, both Cavernas and Topará ceramics "have been found in association with Paracas Necrópolis-style textiles and, on the strength of this context, would seem culturally related" (Paul 1991: 25). Additionally, the utilitarian pottery associated to both of these very distinct style-types is virtually the same (Peters 1991: 241). Complicating matters even further, scholars also find a discrepancy between the simplicity of Topará ceramics

[9] The phases for Topará ceramics have been outlined by Wallace (1986).

vis-à-vis the very elaborate decoration of Paracas Necrópolis textiles (described below), with which they are closely related. This discrepancy results in what appears to be a "veritable schizophrenia in the attitude of Topará people toward iconographic depiction of their ideology and cosmology" (Silverman 1991: 364).

The terms Paracas Cavernas and Paracas Necrópolis also apply to the textile styles of this period. Paracas Cavernas textiles are decorated with angular and linear motifs, with limited use of color. Forms are defined through thin outlines, and the repetition of parallel lines often results in a patterned effect throughout the fabric. The color of the background is always visible, as outlined areas are not filled in with color. More importantly, however, all decorative motifs that are found on Paracas Cavernas textiles are created by working the design as part of the structure of the textile, i.e. they are woven in, or otherwise incorporated through "twining, braiding, knotting, sprang, and looping" (Dwyer 1979: 107). Serpents and birds are among the iconographic motifs used in Paracas Cavernas textiles.

In contrast to the structurally incorporated designs of Paracas Cavernas, Paracas Necrópolis textiles are exclusively decorated through embroidery. These embroidered textiles have been separated into three distinct styles: Linear Style, Block Color, and Broad Line. The Linear Style of Paracas embroideries essentially imitates the formal qualities of Paracas Cavernas designs, but motifs are embroidered onto a previously woven fabric as opposed to structurally incorporated into the fabric. Linear Style designs also consist of outlined areas with a visible background color and no fill. Forms are angular, imitating structurally woven motifs. Among the motifs of Linear Style

embroideries are serpents, felines, and an anthropomorphic being known as the Oculate Being.

In Paracas Necrópolis Block Color embroideries, color is far more important than it was in the Linear Style. Forms are both outlined and filled in with color. Shapes are curvilinear and the iconographic repertoire more varied (Paul 1982: 262). Among the figures that are represented in Block Color embroideries are fish, felines, birds, elaborate figures with vegetation (Peters 1991), and skeletal figures with their heads thrown back. Paul and Turpin (1986) have interpreted these figures as shamans. Frame (2001) argues that these figures represent stages of transformation between death and the status of ancestor.

Finally, the last style of embroideries, Broad Line, is related to the Linear Syle, but the outlines are wider. In Broad Line embroideries, curved lines are also used in combination with the straighter and more geometric forms of the Linear Style.

Chronologically, the Linear Style is the earliest of these three (Paul 1982). This makes sense due to its association with the earlier Cavernas textiles. However, from Phase 10A of the Early Horizon onwards[10] both Linear and Broad Line styles are found together archaeologically, so it is safe to say that both styles coexisted for some time. Paul also believes that the Broad Line style may have been associated to a small group of people, and was possibly a family style (Paul 1982: 277). Furthermore, during the late phases of the Early Horizon all of these styles seem to have been used concurrently. As explained by Paul:

[10] For detailed studies regarding the chronology of Paracas textiles see Dwyer (1971; 1979) and Paul (1982).

> Linear and broad line style images are depicted on Paracas Ocucaje, Paracas Cavernas, and Paracas Necrópolis textiles; these substyles of embroidery preceded the block color style of depiction. However, when the block color style was introduced (in Early Horizon 10B, after the first appearance of Topará-style pottery in Early Horizon 9), it *joined*, rather than replaced, the linear and broad line styles. Not only were they produced simultaneously, but all three substyles of embroidery are subsumed under the Paracas Necrópolis textile style. (Paul 1991: 26)

Another important issue that has come into question during this Early Horizon is the relationship between the area of the Paracas Peninsulas as well as the valleys of Ica, Pisco, and Chincha and the Grande River Drainage. Most of the material discussed above was from the Pisco and Ica areas (including the Paracas peninsula material). Recent Grande River System surveys have found few Early Horizon remains, relative to the larger amounts of material from the Early and Late Intermediate Periods.[11] After her survey of the Ingenio Valley, Silverman (1994) argued that Early Horizon pottery of the Grande River System is of a style different from the Ica and Pisco area styles. She labeled the local style Tajo. According to Silverman, Paracas pottery was intrusive into the Grande River System's Tajo culture, although eventually both styles influenced each other. Recent work by Isla, Reindel, and de la Torre (2003) has contradicted this proposition, however. At the site of Jauranga they have found evidence of ceramics in the Palpa valley that are of the same tradition as Paracas ceramics further north.

There are geoglyphs in the Grande River Drainage that display Paracas iconography and are very reminiscent of Paracas textile motifs. This indicates that geoglyph making was already practiced at this time.

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[11] Large architectural complexes, like those found in Chincha (Canziani Amico 1992) and Pisco (Peters 1988), are not found in the Grande River System.

The Early Intermediate Period (1st Century BC - 7th Century AD)

Phases between Horizons have been labeled Intermediate Periods in the Andean chronological sequence, and these are characterized by a diversity of regional styles. In the South Coast, the predominant culture during the first of these intermediate periods, also known as the Early Intermediate Period, is the Nasca culture. The Nasca are known primarily through their polychrome slip-painted ceramics, although they also made colorful textiles. They are also responsible for the majority of the geoglyphs in the Grande River Drainage.

Nasca art developed out of many Paracas artistic traditions. Artistically, the breaking point between both cultures is the switch from post-fired resin paint on ceramics to the use of slip. The fact that the Nasca used slip with very thin walled vases is reminiscent of Topará (Paracas Necrópolis) ceramics. The Nasca also continue many of the iconographic motifs and vessel forms found in Paracas Cavernas/Ocucaje ceramics. Additionally, the masked figures with extended streamers of Paracas Necrópolis embroideries find their counterparts in the Nasca Anthropomorphic or Masked Mythical Being.

Since the 1920's, Nasca research has focused on developing a relative chronology and in the identification of figures that regularly appear throughout Nasca art. There are two main chronologies which are based on ceramics. Gayton and Kroeber (1927; updated in Kroeber 1956) proposed a four phase seriation of Nasca pots based on a numerical analysis of the shape and color of the vessels in combination with the designs painted on them. According to this study, Nasca ceramics went through two distinct

styles (Phases A and B) and one intermediate style (Phase X). A fourth phase which resembles style B also shows characteristics of foreign styles such as Ica and Tiahuanaco, both of which have been accepted as being post-Nasca. According to Gayton and Kroeber, Nasca phases, in chronological order, were A, X, B, Y. Nasca Phase A was naturalistic while Phase B was abstract.

The stylistic progression in Nasca art from naturalism to conventionalism was confirmed by Dawson's seriation (Rowe 1960). Dawson arranged Nasca vessels according to stylistic similarities. At one end were those that resembled the earlier Paracas culture and at the other the later Wari culture. The result was a nine phase seriation. Very little work has been done with Nasca 1 or Proto-Nasca. The main difference between this phase and Paracas ceramics is the use of slip in Nasca Pottery (Silverman and Proulx 2002; Proulx 2006: 30-33). Phases 2 through 4 were labeled "Monumental" and roughly corresponded to Gayton and Kroeber's naturalistic Phase A, while Phases 6 and 7 were labeled "Proliferous" and corresponded roughly to Gayton and Kroeber's intricate and ornate Phase B. This left Nasca Phase 5 as a transitional phase. Carbon dating helped confirm this chronology. Later studies of Nasca art have refined Dawson's nine phase seriation (see for example Blagg 1975; Proulx 1968; Wegner 1975 and 1976; Silverman and Proulx 2002).

Nasca art of the "Monumental" phases involves figures and motifs that are made with broad, bold shapes. Artists stress clarity, as forms are outlined and placed against a plainly colored background. No landscape settings are indicated that would obscure the

main motif within one vessel. Motifs consist of stylized animal and plant forms to elaborately dressed creatures that have been labeled mythical figures.

Dawson's phase 5 is a somewhat complex period. In her study of Phase 5 style and iconography Blagg (1975) defined the characteristics of three contemporary substyles existing in this phase. These substyles are Conservative (which maintains the characteristics of earlier Nasca Monumental ceramics), Progresssive (which basically depicts traditional subjects with appendages attached) and Bizarre. Bizarre substyle motifs consist mostly of symmetrical forms that seem to sprout or emanate small appendages like volutes, rays, or hair hanks in a radial manner. These volutes and other appendages are called "Proliferation." An example of a symmetrical proliferated Bizarre motif is the rayed face. There is some scrambling or mixing of anatomical details. According to Blagg, the Bizarre substyle demonstrates a new esoteric quality of Nasca religion, which may not have continued into the Proliferous phases.

In late Nasca art, also known as "Proliferous," clarity is compromised by the sheer number of proliferation motifs on individual figures. Not only do these motifs radiate around the main figure, but the main figure itself is segmented, multiplied, and therefore obscured. Mythical creatures often have disproportionate body parts with emphasis on their heads and ornamentation.

Nasca 8 through 9, or Disjunctive, actually fall in the Middle Horizon. Nasca 8 or Loro is a heavier, thicker pottery style with mostly geometric or abstract motifs (Silverman and Proulx 2002: 36). Nasca 9 belongs to the Wari culture and is not a South Coast development (Proulx 2006: 47).

Studies of figure types in Nasca art have identified recurring beings and their variations through time. Seler (1961) identified many recurring beings in the Nasca iconographic repertoire and provided many detailed illustrations of Nasca ceramics. Sawyer (1961) studied the progression and evolution of the feline motif in Paracas and Nasca art and described the characteristics of Nasca figure types such as the fox, the falcon, and the whale. In Roark's article "From Monumental to Proliferous in Nasca Pottery" (1965), the author examined motifs throughout Nasca phases and found a noticeable shift between what he identified as "mythical" scenes in the earlier phases to the "secular" depictions of warfare of later phases. Donald Proulx's dissertation (published in 1968) presented descriptions of different Nasca beings as well as their regional variations. Wolfe (1981) studied the changes in two figure types of Nasca art, the Spotted Cat and the Horrible Bird. These works focused primarily on the imagery found on ceramics and discussed them in terms of their formal aspects. They do not venture into the symbolic significance of the images they describe.

Other studies have provided insight into the nature of the imagery. Sawyer (1966) and Townsend (1985) stressed the importance of agriculture and fertility in Nasca society. However, both of these authors' conclusions were very general.

By the 1970s, Nasca research entered a new phase. Scholars have gone beyond figure typology and began to make interpretations that may provide insight into Nasca beliefs and practices. Flood (1976) studied the depictions of tongues in Nasca art, with comparisons to other images of tongues in the art of the preceding Chavin and Paracas cultures. Her interpretation of this motif equates the tongue symbol with fertility. In a

rare study of a Nasca multi-figure arrangement, Zuidema (1972) used information about Inca practices and social organization to explain Nasca and Wari images, therefore establishing continuity within these three cultures. Scholars are divided as to whether Zuidema's methodology is successful or too speculative (Silverman 1993; Proulx 1989a). Carmichael's article "The Life and Death Continuum in Nasca Imagery" (1994) focused on Nasca Harvester figures and established a connection between these beings and representations of trophy heads. Through the use of ethnographic accounts (mostly modern practices in the Andes), the Harvesters were shown to be representations of both death and fertility. In Proulx's (1989 and 1997) two iconographic studies of trophy head representations, this author used archaeological data and ethnography to explain the use of trophy heads among the Nasca. Through a comparison with the headhunting practices of the Jívaro (Shuar) Indians of the Peruvian and Ecuadorian Amazon and an analysis of the treatment of trophy heads, Proulx argued for militaristic battles among Nasca chiefdoms and a ritualistic or ceremonial treatment of the heads after these battles. According to this author, trophy heads represent rebirth and regeneration. This type of power was at the core of the heads' ritual importance.

The Middle (Wari) Horizon (8^{th}-9^{th} Centuries AD)

Evidence of the expansionist Wari arriving to the south coast dates to about 800 AD. The Wari empire was closely associated to the altiplano's Tiwanaku civilization, although these are considered separate and distinct cultures regardless of the similarity in their iconography and their highland origin.

Wari pottery, although similar in color scheme to much of the Nasca pots, brings highland iconography into the area: figures with ray headdresses as well as birds and other animals are usually depicted with eyes split into white and black halves. Their tunics with geometric shapes and highly abstracted versions of the figures found on ceramic painting are also distinctive of this period.

As far as Wari iconography is concerned, there is a revival of motifs used by the Chavín civilization. The figure of the Staff God as well as the winged attendant figures in profile are found in both Wari and Tiwanaku textiles, pottery, and stonework. In the case of Wari art, these motifs are highly abstracted, simplified, and stylized.

In the survey area covered by the author, Proulx (1999) reported a cluster of Middle Horizon sites on the west side of the Nasca Valley, further downriver from the confluence of the Nasca River and Quebrada Usaca. Remains are mostly limited to cemeteries with massive amounts of cotton. Some tomb chambers were plastered and contained niches.

The Late Intermediate Period(1000-1476)

Unfortunately there has been relatively little work done with Late Intermediate Period material. We know that the art styles that are common for this particular period in the Nasca valley share stylistic characteristics with a contemporary style in the Ica valley known as Ica style. The Late Intermediate Period Ica style, as described by Menzel (1976) had a wide sphere of influence: "as far north as Ancon and the Rimac Valley [or modern-day Lima, and]…as far south as the valleys of Acari and Yauca" (Menzel 1976:

233-234). The ceramics characteristic of this particular period are largely geometric and stylized. Kroeber and Strong (1924) decribed the Ica LIP style as follows:

> The design area is large and tends to cover the entire vessel instead of being confined to free standing figures. This surface is often marked off into panels of rectangles or triangles, each decorated. Bands circle the larger vessels and between these, or on them, are rows of simple geometric figures. Occasionally conventionalized birds are used in this form of decoration… interesting is the appearance of a somewhat exotic fauna, including probably the jaguar, monkey, parrot, and alligator or a large lizard, done in a partly curvilinear but definitely geometric style… (Kroeber and Strong 1924: 112-113).

Robinson (1957) described the Nasca Valley material for this particular period and outlined the characteristics of the two Late Intermediate Period styles of the Nasca Valley. One of the local styles was named Carrizal, roughly contemporary to the Middle Ica style of the Ica valley. The other local style is Poroma, roughly contemporary with the Late Ica style of the Ica valley. Both shared an interest in geometric forms as decorative patterns, along the same line of the Ica Valley styles.

There is evidence that some individuals of the Ica Valley at this time had achieved considerably high status. A great number of pottery as well as objects in gold and silver are found within their tombs. There are also multiple burials associated with the main burial in the tombs of these individuals (Menzel 1976: 221-222).

In the Grande River drainage, there seems to be a trend to build in protected places. As described by Silverman and Proulx, Late Intermediate Period

> habitation sites can be quite large and significantly agglutinated (for example, Ciudad de Huayurí in the Santa Cruz Valley; the spectacular Cerro Colorado site at the junction of the Grande and Nazca rivers). Some sites are located on hilltops in a defensible position. Others, such as Cuidad Perdida de Huayurí, are hidden in a protected position between hills. Perhaps their locations reflect competiton for resources in the drainage (Silverman and Proulx 2002: 280).

Another characteristic of Late Intermediate Period sites in the Grande and Nasca Valleys is that they were largely made of cobblestones and had large, open plazas possibly for public gathering (Proulx 1999).

The Late Horizon (1476-1534)

There is not much information regarding Inka control of the south coast in colonial sources (Menzel 1967: 218). Two Inka centers in the Grande River System are Paredones in the Nasca Valley and Tambo del Collao in the Ingenio Valley (Menzel 1967: 220). Proulx (1999) reported Inka style pottery in only a few locations in the Nasca and Grande valleys. One of the sites was close to the confluence of the Grande and Nasca rivers. Proulx speculates that the absence of sites suggests that local residents continued the Late Intermediate Period styles even under Inka rule.

As will be argued in Chapter 6, much of the rock art of the Grande River System can be safely attributed to the earlier part of this sequence. The majority of motifs encountered in my survey can be compared to motifs on portable objects from the Formative to the Early Intermediate Period.

	Late Horizon	1476-1534
	Late Intermediate Period	1000-1476
	Middle Horizon	8th - 9th Century AD
	Early Intermediate Period	1st Century BC- 7th century AD
Formative	Early Horizon	8th-1st Century BC
	Initial Period	1800-800 BC
	Preceramic	9000-1800 BC

Figure 3.1: Chronology

CHAPTER 4 : PREVIOUS RESEARCH ON GRANDE RIVER ROCK ART AND GEOGLYPHS

Rock art research in Peru is still in its infancy, although the number of studies that have taken rock art as their focus is increasing steadily. Furthermore, Andean scholars have become increasingly interested in attempting a more systematic approach to the study of rock art in recent years.[12] This chapter is a review of the scholarship on rock art research as well as a summary of the problems and issues raised in both petroglyph and geoglyph research.

Rock Art Research in the Grande River System

Unlike the art forms mentioned in the preceding chapter, petroglyphs have not been considered in the study of the cultural history of the south coast. Being difficult to date and place culturally, petroglyphs do not make good samples in seriations or chronologies. At the same time, they are not colorful like the ceramics or textiles, and nor are they large and impressive like the geoglyphs. They have not, therefore, been a part of the corpus of images used to acquire information about the various civilizations that inhabited this area. Few sources have focused exclusively on south coast rock art as an art form and as important cultural material.

Núñez Jiménez's (1986) publication on Peruvian petroglyphs was the first attempt to create a catalogue of rock art sites in this country. It was actually the only

[12] At the time of this draft, the first two national conferences on Peruvian rock art took place in Cuzco (2004) and Trujillo (2006). Separate rock art meetings took place in Lima in June and July of 2004.

large-scale publication of this kind. Núñez Jiménez focused primarily on coastal sites, with only a few sites located in the highlands. He used photography and tracings to record the imagery at each site. Considering the damage that some of these sites have endured since he published his catalogue (Rubén García, personal communication; Joerg Haeberli, personal communication), Núñez Jiménez's work remains an important source of information regarding the iconography and style particular to each site.

At the same time, his work is far from comprehensive. The sites he included are those of easy access, close to roads or towns. It is likely that not all rocks were traced or photographed during his visits as relatively few were reproduced in his publication. This is likely to be due to time restraints. For example, at the site of La Caseta, in the Santa Cruz valley, there were two decorated rocks that he missed because they were located on a *quebrada* behind the hill on which the majority of rocks are located. One of these rocks is decorated with a double-headed serpent that closely resembles the snakes that appear on some rocks at the site of Chichictara in the Palpa valley. In addition, Núnez Jiménez's own documentation of the Chichictara area was only partial, as he separated the site into smaller sites and did not include all petroglyph-covered rocks in any of these sectors. Furthermore, not all of his drawings are tracings done directly from the petroglyph-covered boulder. The distortion on some drawings can only be explained if they were based on photographs that were taken at an angle.

A more complete documentation of Chichictara would have to wait until the 1987 project sponsored by Peru's Instituto Nacional de Cultura. The site, located in the Palpa Valley, was first mentioned by Eloy Linares Málaga (cited in Núnez Jiménez 1986) who

identified some of its motifs as Chavín and others as Paracas and Nasca. Later work in the area was done by Giuseppe Orefici (Orefici and Pia 1982), who seriated a sample of its petroglyphs. In mid-1980's Chichictara was extensively and systematically documented in a project directed by Alejandro Matos Avalos, under the supervision of the Instituto Nacional de Cultura (National Institute of Culture, or INC). The project resulted in the registration of 158 carved rocks. The INC project involved the documentation of imagery through photographs and scale drawings. According to the description of the project, the petroglyphs were also traced. However, a comparison of the drawings to the actual rock engravings often brings up discrepancies that indicate that final drawings which combine the *in situ* scale drawings with the tracings (which are more accurate since they do not involve an individual's rendering) were never made. The snakes on Rock 53, for example, have arrow shaped heads, whereas the INC drawings show them with rounded heads. The spots shown on the feline of Rock 50 are shown orderly and aligned in the INC drawing, while this is clearly not the case on the actual petroglyph.. The whiskers on the serpents on the INC drawing of Rock 47 are not represented with the comb-like shape which is clear on the petroglyph.

A very significant problem is that many of the drawings are not complete, and only fragments of some figures, and at times not all figures, are shown. For example, the drawing of Sector II's Rock 7 shows an anthropomorph and a circle, with nothing in between, when in reality there is another figure depicted in this area. Sector II's Rock 6A has a quadruped decorated with a linear pattern that is not shown in the INC drawing. On Rock 53, also in Sector II, there is a spotted feline that is not shown in the INC

drawing. Finally, the drawing of Rock 57 shows a comb-like form in the upper area and what appears to be a small figure in the lower area. This petroglyph actually represents a large, seated figure with a semi-circular headdress similar to other seated figures in Chichictara and in La Viuda (Palpa Valley) and San Marcos (Aja Valley).[13]

One possible explanation for such oversights is lack of time. The angle at which the sun illuminates the boulders at any given hour may obscure portions of the petroglyphs making them very difficult to see for the person making the *in situ* drawings. The only way to avoid such problems is to observe the petroglyphs at various times of day and draw or photograph them as the different areas of the engravings become clear. Another possible explanation is a lack of familiarity with other known rock art sites in the area that may share similar iconography such as those in the Aja and Santa Cruz valleys. Yet another possibility is that, since this project dealt with the registration of the images as an inventory and the adaptation of the site as a tourist attraction (through the construction of a parking lot and placement of tourist information signs), making the drawings to scale as a simple reference tool was considered more important than making accurate or detailed drawings for documentation purposes.

As far as general catalogues of Peruvian rock art, Núnez Jiménez was followed by Rogger Ravines, who assembled a smaller catalogue of Peruvian petroglyph sites. It was partially based on the work already made by Núnez Jiménez and did not attempt to be a comprehensive catalogue of the images in each site. In fact, very few examples of the rock art are reproduced either as photographs or drawings in this publication, making this

[13] See Chapter 6 for a description of the Seated Figure Iconographic Complex.

a more useful tool for the location of sites than the study of the iconography of the petroglyphs. In Ravine's inventory of sites, sites are separated by departments. The Ica section is based only on previous work by Pezzia (1969) and Núnez Jiménez (1986). Only a brief description of the figures is provided.

Guffroy (1999) builds on earlier work at the site of Checta in the Chillón Valley in a study advertised as a systematic and interpretive analysis of Peruvian rock art. The result was an overall survey of the rock art of Peru, albeit one where the author admits and acknowledges the limitations of such an endeavor. The major contribution of this survey is still the material on Checta, as the author relies on other scholar's research for the information on other sites. Even the illustrations used throughout this study are based on publications such as Núñez Jiménez's study.

A recent publication by Rainer Hostnig (2003) provides a more inclusive catalogue of rock art sites with maps, bibliographic information, and brief descriptions. Included in Hostnig's catalogue are previously unpublished sites as well as some locales with geoglyphs, the latter of which had been hitherto treated separately from rock art in most of the earlier scholarship. This inclusion make Hostnig's section on the Department of Ica a more comprehensive documentation of sites than the previous studies by Núnez Jiménez or Ravines.

Problems of Style, Iconography and Chronology

One of the main problems with the current state of rock art research in the Grande River System is that there are too many assumptions and presuppositions about its dating and relation to other art forms. These problems are present in the scant studies of Grande

River System rock art, specifically in their treatment of style and iconography. As most of the research has focused on the Palpa Valley, the examples listed here are limited to this particular area.

Description and Interpretation

Early rock art scholarship in this area often contains very specific interpretations of motifs. Unfortunately, these are based on very little information provided by the image in question. Núñez Jiménez, for example, often provided detailed descriptions of the posture, placement, and actions of anthropomorphic figures. In one case, he interpreted one anthropomorphic petroglyph at the Palpa Valley site of Chichictara as a man playing a flute (Núñez Jiménez 1986: 291). Although the petroglyph clearly depicts an anthropomorph holding an elongated object, his interpretation is not open to the possibility that the object in the figure's hand may be a simple staff or another object such as a snuff tube or a pipe. Other examples of detailed descriptions based on little visual information are found in Orefici and Pia (1982: 175), who described some figures as decorated with plumes. However, all that is evident in the petroglyph was a semi-circular object that was too stylized for any specific materials to be identified. There is a need in this field to provide detailed and thorough formal descriptions.

Iconographic and Stylistic Comparisons

In comparing representational petroglyphs' form and style to other media, one is largely restricted to periods and cultures that likewise placed particular importance on figurative or representational subject matter (Paracas, Nasca and Wari in particular). Cultures and periods in which abstract motifs seemed to be preferred, such as the Late

Intermediate Period or the Late Horizon, are therefore largely left out of these comparisons. However, the possibility exists for abstract or geometric motifs to be preferred for one medium while representational subject matter is used simultaneously in another medium. Such a scenario complicates matters as there may not be comparative material available for the dating of the rock art.

Within the scholarship on south coast rock art, the analysis of rock art has often included comparisons that were very general, sometimes overlooking important contextual information. Orefici and Pia (1982: 171), for example, compared an anthropomorphic figure on Chichictara's Rock 07 of Sector I (simply called Rock 1 in Orefici's study) with Paracas textile motifs because this figure, according to the authors, was represented upside down like some Paracas figures. No other formal or iconographic characteristics of the petroglyph motif are described or compared to Paracas textile design and iconography. More problematically, the authors relied completely on the position of the figure to identify it as Paracas, without taking into consideration that the boulder may not be in its original location. In fact, not only are other figures in this rock "upside down" but also the boulder is located at the bottom of a steep hill.

It is also important to point out that comparisons of south coast rock art have also been made to unrelated cultures and regions, too distant for any direct connection to exist (see for example, Orefici and Pia 1982).

Associated Material

Associated material such as surface remains should be documented thoroughly in any study of rock art. There should also be attention paid to function and date of the sites

in the vicinity. In some studies of south coast rock art, there have been problems due to the discrepancies between the attribution of the rock art vis-à-vis the surface remains at the site. Núñez Jiménez's attribution of the Palpa site of San Genaro (4-5 kms downriver from Chichictara) was based on an early description of Palpa Valley rock art sites by Eloy Linares Málaga, who compared the Palpa petroglyphs to Paracas and Chavín motifs. As it is clearly stated in his text, Núñez Jiménez only documented surface potsherds that were Nasca in style in the vicinity of those petroglyphs (Núñez Jiménez 1986: 261), and no Paracas potsherds were found in the area. Furthermore, he does not elaborate on what aspects of the petroglyphs could be comparable to Paracas art. At the site of La Viuda, also in the Palpa Valley, Núñez Jiménez mentions the following styles of associated ceramic potsherds: Chulpaca, Soniche, Tacaraca, and Ica (Núñez Jiménez 1986: 267), all of which are Late Intermediate period and Late Horizon styles, but then attributes the petroglyphs to the Nasca culture (Early Intermediate Period) without explaining what formal, iconographic or stylistic aspects of the figures could be related to Nasca iconography, or why there are no Nasca surface remains in the area. Formal and iconographic comparisons should be one way of supporting an attribution, but the associated material at any given site also indicate periods of activity at that locale.

Rock Art Techniques

There have been presuppositions regarding which techniques should "logically" precede each other in the making of rock art. They are based on the idea that images and the techniques employed to make them evolve and become more complex with time. Therefore earlier, crude, images eventually "improve" and become more detailed

(Chippindale 2001: 251). This progression has also been assumed in the rock art of Chichictara (Orefici and Pia 1982: 175). In order to substantiate such proposition, the material should be compared to datable objects.

The Geoglyphs of the Grande River Drainage

Recent scholarship on rock art has included geoglyphs and earthworks with this artistic tradition (Bednarik 2001; Hostnig 2003; Whitley 2001). Sites in my survey revealed that rock art sites tended to be on the side of the valley adjacent to the geoglyph-covered Nasca Pampa. Additionally a few sites had geoglyphs nearby or within them. The relationship between petroglyphs and geoglyphs is not unique to the Grande River System. In discussing the petroglyphs in the Department of Arequipa, Linares Málaga (1970) mentioned the existence of geoglyphs at the petroglyph site of Toro Muerto. These were small figures of anthropomorphs, zoomorphs, and geometric figures made by aligning stones. Linares Málaga attributed these geoglyphs to the Wari, Chuquibamba, and Inca, but did not elaborate on what stylistic or iconographic characteristics supported his attributions. Given the association of petroglyphs to geoglyphs, as art work that is intimately tied to its environment, a word about geoglyph research is necessary.

Dating, Form, and Iconography

Some of the same problems that plague rock art studies in the Nasca area can also be found in geoglyph research. This is another art form that is bound to its location, and yet is very difficult to date. The only way to attribute these geoglyphs to a particular culture or period is through formal comparisons to the datable art, and again we are

limited to those cultures that had a representational artistic tradition.[14] Once again, simpler designs that consist of basic shapes are assumed to be earlier than more intricate designs defined by evenly spaced lines. Additionally, scholars have had a tendency to group all biomorphic and anthropomorphic designs together, without considering the possibility of multiple phases of construction.

No one has done a detailed, comprehensive, formal study of all known figurative or representational geoglyphs, the only possible exception being the little known study by Silva Santiesteban (1991). Silva Santiesteban separated figurative geoglyphs into five categories: (A) all anthropomorphs, a figure he called "fetus" or "E.T.," some animals such as a condor, etc., some of which were made by cleaning the areas outside of the main silhouette, and some made by clearing the ground surface as well as the making of grooves; (B) the "classic" figures (the monkey, dog, birds, among others) drawn with a single line made by a continuous groove on the ground; (C) all geometric designs; (D) cleared open spaces and "plazas;" and (E) ray centers (straight lines radiating from a common point). He argues that group A preceded group B because one of the figures, the "fetus" corresponds to the Paracas style. Although this statement is accurate, since this is probably the geoglyph that is closest stylistically and iconographically to any examples of datable work, the attribution of other figures within this category is not explained. Based on the information Silva Santiesteban presents, it is debatable whether all of these figures truly represent one group, were made in the same period, or served the same function.

[14] In attributing this type of ground drawings to a specific period or culture, scholars have made comparisons of these to motifs found in Early Nasca slip painted pottery (Kosok and Reiche 1949: 210; Hadingham 1987: 77-79; Reinhard 1988: 48). These comparisons usually involved the choice of motifs rather than the style of the figures.

General characteristics of geoglyph morphology have been outlined in several sources,[15] but these are usually very basic and often consist of generalizations. In most of these cases representational geoglyphs tend to be treated as one group (e.g. Kosok and Reiche 1947, 1949; Kosok 1965; Hadingham 1987; Reinhard 1988a and 1988b) and biomorphic figures are usually discussed together, without addressing the possibility of multiple phases. Descriptions change little between studies, and some generalizations and oversights are passed on uncritically between sources. One of the most common assumptions about figurative or representational geoglyphs is that they are made with a single, continuous line. During the 1940's several scholars such as Hans Horkheimer (1947: 48) and Paul Kosok and Maria Reiche (Kosok and Reiche 1947: 205; 1949: 208; Kosok 1965: 56) had already noticed and described this characteristic. Although such a keen observation is important and has led later investigators to address the possibility of the lines being used as ritual pathways, it is at the same time a dangerous oversimplification.[16] It is these drawings, made with a single continuous line, spaced using modular widths, which are usually used to describe the totality of figurative or representational geoglyphs. Even a cursory look through the many photographs and drawings available in published sources reveals that there is no single geoglyph style,

[15] For example, early on Kosok and Reiche (1947) separated the geoglyphs into single and double lines, triangular, rectangular and trapezoidal ceremonial enclosures, "drawings" (figurative designs) and rock piles and short parallel lines. This basic classification was kept consistently through later work (Reiche 1949b, a; Kern and Reiche 1974). Other sources separate geoglyphs into types based on general formal characteristics such as lines, geometric shapes (like trapezoids and spirals), and figures, or representational geoglyphs (see Reinhard 1988a, for example).

[16] This same description kept on being used repeatedly and uncritically in subsequent publications (Kern and Reiche 1974: 125; Hadingham 1987: 76-80).

however, but that there are a variety of styles represented not just on the Nasca Pampa, but in the valleys as well. Some geoglyphs, in fact, appear to be transitional designs between styles, such as one reproduced by Kern and Reiche (1974: Figs. 136 and 137). This anthropomorphic figure, made with a combination of outlines and spiral designs, seems to combine characteristics of the mountainside anthropomorphic geoglyphs in this region, largely based on outlines, with the single-line modular designs on the Nasca Pampa.

Technique is one way to distinguish geoglyph types from each other. Chapter 1 defines additive and subtractive techniques in the making of geoglyphs. A rarely mentioned additive technique, for example, consists simply of aligning stones. Many of the geoglyphs recorded in my survey correspond to this type, which does not lend itself to the function of pathways. Considering the diversity in geoglyph designs and techniques, different geoglyph types may have served different functions, and technique should therefore be as important as form in order to determine the function of these geoglyphs.

Hypotheses for the Making of the Nasca Lines

The purpose or function of the Nasca Lines has been the focus of a lively debate in South Coast research. The various hypotheses have been summarized thoroughly in published sources before (Silverman and Proulx 2002; Aveni 1990a and 2000 inter alia) so I here only present a brief overview of the major ideas regarding their possible functions.

Geoglyphs as Pathways. The idea that some of the Nasca area geoglyphs seved as pathways arose quite early in Nasca Line research. By 1940, Mejia Xesspe had

already mentioned the possibility that these, mostly straight, lines on the desert could have been roads or pathways. Kosok and Reiche (1947 and 1949) also noted that representational designs were often made by a continuous line that never crossed itself, allowing for single-file processions on these drawings. Morrison (1978) related these straight pathways to those in other Andean regions, where straight lines link shrines. Later, Reinhard (1988) compared these lines to paths related to mountain worship.

Nasca Lines and Astronomical Observations. The major proponents of this hypothesis are Kosok and Reiche, the latter of which spent most of her life studying possible astronomical alignments in the Nasca Pampa. Although Reiche published some of her studies and hypotheses, the correlation was never established for all geoglyphs on the Nasca Pampa or the surrounding area. Furthermore Hawkins (1978) argues later that there was no statistical evidence that demonstrated that lines on the *pampas* had astronomical alignments.[17]

Ethnographic Explanations. There have been several attempts to explain the Nasca Lines through comparisons to other Andean practices, some of which have already been mentioned (Morrison 1978 and Reinhard 1988a). Reinhard (1988a) explained the Nasca Lines as part of a larger set of ideas in the Andes regarding water and mountains. According to Reinhard, not only could the lines point at these features, the iconography of the representational designs could also refer to water and related subjects. Other scholars who attempted ethnographic approaches were Aveni (1990b), who associated

[17] For critiques on these authors see Isbell 1979a and 1979b.

ray centers on the Nasca Pampa to the Inca *ceques*, and Urton (1990), who compared the use of the Nasca Pampas to Inca and contemporary Andean treatments of ritual space.

Water and the Geoglyphs. The geoglyph interpretations that address water sources are quite varied, and in these the geoglyphs vary in function from pointers to celestial phenomena to mapping devices of underground water. The work of Reinhard was already addressed, relating the lines to water and mountains. Kosok (1965: 58) had argued earlier that astronomical observations would have been of particular importance in valleys as dry as these. Aveni (1990: 83), among other things, also believed that there could be a relationship between ray centers, mountains, and water, since he did not find many centers in the middle of the Nasca Pampa. He also found a particular correlation between trapezoids and water. Many of these geoglyphs were made in between quebradas and their axes were made parallel to the *quebrada*'s direction of water flow (Aveni 1990: 85) More recently, Donald Proulx and David Johnson have investigated the relationship of geoglyphs to underground sources of water. Johnson has put forth the idea that geoglyphs may indicate the presence or absence of aquifers, thereby providing a map of subsurface water resources (Proulx and Johnson 1999).

Other Explanations. Because of their scale, the Nasca Lines have attracted both scholars and aficionados alike, and this has also led to less scholarly publications on the subject. One of the best known of these involves the work of von Däniken (1969 and 1998), who argued that these lines were evidence of extraterrestrial visits. A lesser known publication by von Breunig (1980) put forth the idea that the lines were indeed race tracks quite similar to those used by modern athletes.

The Relationship between Rock Art and Geoglyphs

There has been some speculation as to the relationship between Nasca Pampa geoglyphs and the Grande River System petroglyphs, specifically those of the Palpa Valley site of Chichictara. Some of Maria Reiche's work addressed the question of whether the same units of measure were used in the designing of petroglyphs and geoglyphs (Spencer 1983; Reiche 1993: 515),[18] therefore assuming contemporaneity between these two art forms. Later scholars focused on determining whether or not one art form precedes the other. In the work of Markus Reindel, Johny Isla, and Klaus Koschmieder, petroglyphs are only one of the cultural remains studied within the Palpa Valley in order to reconstruct its cultural history. According to these scholars (Reindel, Isla Cuadrado, and Koschmieder 1999: 195; Reindel and Isla Cuadrado 1999: 375-376), the famous geoglyphs on the *pampas* and valleys have their origins in petroglyphs.[19]

The progression from petroglyphs to geoglyphs, according to these scholars, is as follows: First, the inhabitants of the Palpa Valley incised and scratched designs on hillside boulders or cliffs in the form of petroglyphs such as those found at Chichictara.

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[18] During the 1980's, Reiche studied the use of arcs and units of measure that, she proposed, were used in the making of representational geoglyphs among the Nasca Lines. She believed that the similar arcs and units were used in the making of one anthropomorphic petroglyph at Chichictara. Unfortunately Reiche did not elaborate on how she selected this specific petroglyph among all designs at Chichictara, or whether the same arcs and units could be found among other examples of petroglyphs at Chichictara. Furthermore, such a complex system of arcs seems like an overly complicated method for designing small drawings that were pecked on a boulder, especially since these petroglyphs have rugged outlines and a system like that would be very difficult to observe.

[19] At the time of this draft, several articles appeared in the Lima newspaper *El Comercio* describing Reindel and Isla's work at Palpa and advancing their thesis that the Palpa geoglyphs predated those between the Nasca and Ingenio valleys (see for example Llerena 2002).

Then, similar motifs (specifically anthropomorphs) were drawn on a larger scale as geoglyphs on the actual hillsides and slopes flanking the valley, where they would still be visible by its inhabitants. Finally, the geoglyphs became more abstract and reduced to simple geometric forms. These were made on the raised flat areas, the *pampas*, no longer easily visible from the valleys (Reindel and Isla Cuadrado 1999: 195). The location of both petroglyphs and "early" anthropomorphic geoglyphs, on the slopes of hills, as well as the similarities in the choice of motifs (anthropomorphs), according to these authors, justifies the comparison. Their hypothesis for this development also implies a progression from naturalistic to stylized that can also be observed in the ceramics of the Nasca culture.

Reindel, Isla, and Koschmieder are not the first scholars to propose this progression from the Palpa petroglyphs to the *pampas* geoglyphs, however, as a previous publication by Orefici (Orefici 1993: 161, 164-165, 220) also advances a similar idea regarding the development from these to the hillside anthropomorphs, which Orefici identifies as Paracas. Orefici refers to the hillside anthropomorphic geoglyphs as transitional elements between the Palpa Valley petroglyphs and the "true" *pampa* geoglyphs (Orefici 1993: 164).

The dating for both petroglyphs and geoglyphs according to Reindel, Isla, and Koschmieder is as follows: They date the petroglyphs to either Ocucaje Phase 8 (400-200 BC) or Ocucaje Phase 10 and Nasca 1 (200 BC to 1 AD). They also believe that geoglyphs began to be made around 400 BC and the anthropomorphic geoglyphs were made between 200 BC and 1 AD (Reindel, Isla Cuadrado, and Koschmieder 1999: 371).

The latest geoglyphs, they state, date from 600 AD to 1000 AD, or the Middle Horizon (Reindel, Isla Cuadrado, and Koschmieder 1999: 373). Part of their justification for the earlier date of the petroglyphs is that motifs found among the petroglyphs of Chichictara, such as birds, snakes, and circles with dots, are typical of Paracas and Proto-Nasca art (Reindel and Isla Cuadrado 1999: 195). They do not elaborate however on what makes them typical of these cultures, whether it is only the type of motifs (which would be a weaker argument, since birds also appear in the art of later cultures) or strong stylistic or iconographic correspondences (neither of which they mention). According to these scholars, the early dates for the anthropomorphic geoglyphs are also supported by the superimposition of the Reloj Solar, a large geoglyph that incorporates two spirals, over one anthropomorphic geoglyph.

There are several problems with the aforementioned propositions. Rock art is perceived as being made all at once and is treated as a single unit, even within large sites. Reindel, Isla, and Koschmieder's work is no exception to this, since, although they propose a sequence for the geoglyphs, the petroglyphs are all discussed and treated together. The authors do not consider the possibility that these petroglyphs may have been made throughout several periods or phases, some of which could be contemporary with the more geometric geoglyphs or could even have later dates. Additionally, the possibility that the anthropomorphic geoglyphs may have also been done in separate phases or periods is not considered.

The petroglyphs of the Palpa Valley and other portions of the Grande River System should not be treated in such a monolithic manner either. They have to be

studied more critically, paying close attention to the techniques used, the iconography and styles present at each site, and their relationship to other cultural material in the area. Even then, our conclusions regarding their dating and attribution may still be tentative at best.

In Chapter 6 I propose a tentative chronology for Grande River System rock art that includes petroglyphs, pictographs, and geoglyphs. The results complicate the proposition advanced by reindel, Isla, and Koschmieder as there is evidence for petroglyph making activity that is roughly contemporanous to the Nasca style geoglyphs on the *pampas*.

CHAPTER 5 : ROCK ART SURVEY OF THE NASCA VALLEY

From February to July of 2000, I undertook a rock art survey of the Nasca Valley, the main objective of which was to determine if rock art was present in the areas of this valley that had not been considered in the previous reconnaissance surveys. This chapter outlines the objectives of this survey as well as the field methods employed. It provides a description of the distribution and stylistic characteristics of Nasca Valley rock art. A more elaborate discussion of location is included in Chapters 7 and 8.

Objectives and Rationale

The first scholarly source to mention petroglyphs in the Nasca valley is the final report for Proulx's 1998 study of the settlement patterns in the Nasca and Grande Valleys.[20] Proulx's settlement survey documented the existence of four petroglyph sites in the Nasca Valley. Out of these four sites, two (RN49 and RN51) were located deep inside *quebradas* that lead into the adjacent Nasca Pampa and one (RN50) was located on a group of boulders high on a hillside. The remaining site (RN43) was part of a larger cemetery and habitational site.

Working as an assistant for Proulx during this time, I was intrigued by this art form that had been left out of reconstructions of this area's ancient societies, and curious

[20] Although scholarly sources made no mention of the rock art in the Nasca valley before Proulx's report, some of the current Nasca Valley residents are aware of the existence of a few petroglyph sites. Some may even offer to guide the very infrequent tourists to site QMA01 (Proulx's site RN49).

as to whether there were more undocumented petroglyph groups. Past survey work in the Grande River System focused on settlement patterns, and Proulx's work concentrated on documenting the sites in the areas immediately flanking the river. This included the lower area of the hills, where structures and cemeteries are likely to be found. If there were more petroglyph sites in this area, they probably would be located on the rocky outcrops on the upper portions of hillsides or inside the *quebradas*. My survey, therefore, consisted of a systematic search for rock art in these areas, including the largest *quebrada* in the valley, called Quebrada Cangana Majuelos. Additionally, the petroglyphs discovered by Proulx also needed more detailed documentation through photographs and drawings, and their location and iconography needed further analysis. This was done in order to assemble a detailed corpus of investigation for the study of the area's rock art.

I chose to focus on the lower Nasca Valley and Quebrada Majuelos in large part because these were the areas in which Proulx had documented rock art. This was also an area that could be covered thoroughly within the time constraints of my survey. It also contained other types of sites (habitational sites and cemeteries) with datable material. Further upriver is the site of Cahuachi, which has been and is currently being extensively studied and excavated.

Once rock art concentrations were found, the art work was documented and the site locations registered. Peru's Instituto Nacional de Cultura (INC) approved the rock art survey on March of 2000, and the results of this survey were first presented as a Final Report in 2001 to the INC (Nieves 2001). Records of all documents relevant to this survey, including this Final Report, are filed under the INC's Expediente No. 5077-99.

Survey and Documentation Methods

All hillsides with exposed sandstone strata as well as all boulders within the survey area were inspected for petroglyphs, including those within all the *quebradas*. Wherever rock art was found on a surface of a stratum of exposed rock, it was recorded as a series of panels. An example of this is site QMA01 (Proulx's RN49). Once the number of boulders or panels with rock art at a given site was determined, each was identified by a number or letter. I took notes on the appearance, iconography, and condition of the petroglyphs as well as the size of the decorated areas of the rocks or panels, their orientation, and the location of the site.[21]

The documentation of the rock art involved a combination of drawing, photography and tracing. While in the field, preliminary sketches were made of each rock or panel in order to determine the number of individual features on each surface. Photographs (slides) were taken of most petroglyphs and painted surfaces, and any associated cultural material such as surface sherds. No surface collections were made; all ceramic potsherds associated to the rocks were simply photographed *in situ*. No rock surfaces were chalked for the photographs, as this once accepted method may actually harm the rock surfaces and the petroglyphs on them (Loendorf 2001: 55).

The field techniques used in this survey have since been discussed by Loendorf (2001) and Bednarik (2001), both of whom agree that photography is probably the most reliable and least damaging of any field techniques. Although both believe that tracing can be an accurate field technique, Bednarik (2001: 57) has pointed out that tracing with

[21] Participants in the projects are listed after each site description in Appendix A (for all rock art sites) and Appendix B (for all sites in Quebrada Majuelos).

plastic sheets may damage the surface of some rocks. In this survey, tracing was necessary since photographs may not have captured all of the faint or eroded details. Tracing was also necessary since, due to time restraints, some of the photographs were not taken with optimum lighting conditions. However, because Nasca Valley sandstone is often soft and brittle, extreme care was taken during the process of tracing, so as to not cause any damage to any of the petroglyphs or rock surfaces. These tracings, made with rolls of transparent plastic and permanent markers, provided useful supplemental information to the documentation of rock art through photography, as well as a more detailed 1:1 drawing of the different features in each boulder.

Although tracing was at the time the only way to capture many of the more eroded images, it also presented many problems. The increasing heat throughout the day made it difficult to trace large petroglyph-covered boulders because the plastic stretched. The documentation of large rocks was further complicated by the fact that several sheets of plastic were needed for these tracings (as in Rock 01 from Site 02). In these cases, several visits to the site were necessary.

Final 1:1 drawings were made by transferring the tracings from the sheets of plastic to paper. The large sheets of paper were then run through an oversized scanner and converted into digital images onto which a scale was drawn.[22] Once smaller digital versions of these drawings were made, the individual features were labeled for easier reference in the iconographic analyses.

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[22] In the case of the tracings made at Chichictara, in the Palpa valley, the process was reversed. The paper versions had a scale drawn on them, and then they were reduced in size, and finally scanned using a flatbed scanner in order to create digital files.

During the survey, the coordinates of each site were taken with a portable GPS device. These coordinates were later plotted on a 1:50,000 map of the Instituto Geográfico Nacional. For reference purposes, both UTM and degree/minute/second coordinates of all sites are included in Appendix A and B. Also during the survey, any habitational sites or cemeteries as well as all other archaeological remains observed near the newly found petroglyph sites were noted. The final report of Proulx's settlement pattern survey was often consulted *in situ* to identify these sites.

The work that was done after the survey included the making of the final maps, which incorporate sites from Proulx's survey, and the identification of iconographic and stylistic categories among the petroglyphs. In addition, comparisons have been made to petroglyphs at other sites of the Grande River System as well as to the geoglyphs also found in different parts of this drainage, using all publications and available reports as sources of images. In the process, some problems with the original documentation of these sites were noted, such as at the site of Chichictara (see Chapter 4). I therefore have used my own photographs as well as my own tracings and drawings to supplement any problematic material.

One last, but very important, comment should be made regarding the numbering of the petroglyph sites documented in this survey. At the time of the survey and in earlier papers by the author (Nieves 2001 and 2006) Nasca Valley rock art sites are simply numbered from 1 to 22. In order to distinguish these numbered sites from Proulx's habitational sites and cemeteries, which were labeled with a number and the prefix RN, in this dissertation I added the prefix X to all Nasca Valley rock art sites.

It is also important to point out that all sites found inside Quebrada Majuelos received the prefix QM in my survey, whether they contained rock art or not. This area was part of a separate survey by myself that complemented Proulx's work. At the time of Proulx's survey, Quebrada Majuelos was only entered to document one site, labeled RN49 by Proulx. Because this site was part of two labeling systems, it received two identifying numbers: Proulx's RN49, as part of Proulx's Nasca Valley survey, and QMA01 in this dissertation, as it was part of Quebrada Majuelos. In order to avoid confusion, in this dissertation I always indicate both numbering systems for this one site.

Relative Dating Methods

One of the most problematic issues regarding rock art is the dating of the artwork. As most of the examples of rock art in the Nasca Valley are petroglyphs, the issue of dating is particularly relevant. According to James D. Keiser (2001), although recent scientific developments have enabled archaeologists to date some pictographs, archaeologists still rely on some methods of relative dating in the analysis of other forms of rock art. However, scientific dating of this medium is still at its infancy and much work still needs to be done. Keiser states that there are eight major types of evidence that can be used to create a relative dating for rock art:

> (1) association with dated archaeological deposits; (2) association with dated portable (mobiliary) art; (3) portrayal of datable subject matter; (4) superimposition of designs; (5) rock varnishing and weathering; (6) access to images; (7) ethnographic knowledge; and (8) materials used in the production of the art (Keiser 2001: 118).

Not all of these apply to the rock art sites of the Nasca valley, however. In the present study, the associations to dated, portable art will be used in the creation of a relative

dating for the petroglyphs in this area. Stylistic and iconographic comparisons to portable objects such as textiles or ceramics helped secure a placement for the art within the known sequence of styles that were used in this valley. For this, a basic formal analysis was used, as well as a careful observation of the iconographic elements that may be found in other dated objects. Surface remains such as potsherds as well as the available information regarding nearby habitation sites and cemeteries were taken into consideration when proposing relative dates for petroglyph sites. In addition, comparisons were made to the area's geoglyphs.

To a lesser scale, superimposition was also used. The use of this type of evidence was limited, however, as not enough examples of superimpositions were found to create a generalized chronology based on this type of evidence alone (Keiser 2001: 124).

Distribution of Sites in the Nasca Valley

In the area covered by the present survey, the lower portion of the Nasca valley, sites were not evenly distributed. Two clusters of petroglyph sites are easily distinguished (See Fig. 7.1). These were named according to their location: The Northern Cluster is located in the northernmost area of the survey, closer to the confluence of the Nasca River and Grande River, and the Southern Cluster is next to the Pampa de Majuelos in the southernmost portion of the survey area. The remaining sites constitute what will be referred to here as the Central Area, which is divided by the Nasca River into northeast and southwest sections. These two sections differ in their topography as well as in the types of petroglyph sites found in those locations. Overall, the survey

revealed a preference for the northeast side of the valley. The petroglyph sites on the southwest side of the valley are fewer and considerably smaller than those on the northeast side. A description of each of these areas is provided in the following chapter. Detailed descriptions of each site and individual features within them can be found in Appendix A and my report for the INC (Nieves 2001).

Other Petroglyph Groups in the Grande River System

Petroglyphs in the Grande River System (Fig. 5.1) have been known primarily from the Palpa Valley. The archaeological surveys of individual valleys have helped locate more concentrations of rock art[23] or demonstrated that this art form is not present at all in specific valleys or valley sections.[24] However, most of the valley surveys have not had rock art documentation as their primary focus. Instead, they concentrated their efforts on settlement patterns and their changes through time. The following section provides a brief description of the few known rock art sites in the Grande River System, outside of my survey area. These sites were not surveyed by the author in a systematic manner, although sites were visited and many petroglyphs were photographed or traced. Although a brief description of the iconography found at these sites is provided here, a more detailed look at some of these sites' examples of rock art will be provided in subsequent chapters.

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[23] Reindel, Isla and Koschmieder (Reindel, Isla Cuadrado, and Koschmieder 1999) documented a few isolated examples of petroglyphs in the Palpa valley that were previously undocumented. These are not indicated in any of the maps provided here.

[24] Helaine Silverman (personal communication) stated that no petroglyphs were found in her Ingenio Valley survey. None were reported in the publication based on her survey (Silverman 2002).

Palpa Valley

By far the best-known groups of petroglyphs come from the Palpa valley, north of the Nasca River: Chichictara, San Genaro, and La Viuda. The site of Chichictara is about 10 km north of the city of Palpa, following the road that leads into the Palpa valley. The site of La Viuda is about 4 km downriver from Chichictara. These sites were included among the list of sites in Browne's survey of the Palpa valley (Browne and Baraybar 1988; Browne 1992). Previously, both sites were documented by Núñez Jiménez (1986), who reproduced some of his drawings of the rock art in his book of Peruvian petroglyphs.

The site of Chichictara consists of a series of engraved boulders that are distributed inside narrow *quebradas* as well as on the tops of the hillsides that flank the valley. Most of the engraved rocks were large boulders of sandstone. This sandstone is not as soft as the type that is found in the Nasca valley, although it is soft enough to allow for considerable damage due to erosion, flaking, and vandalism.

Chichictara is the only rock art site in this area that has been the subject of an extensive documentation project, directed by the INC (Matos Avalos 1987). The INC separated the site into four sections,[25] which were roughly indicated in the sketch of the site. However, this sketch is not very accurate and the site itself was never plotted onto a topographic map. The INC report also lacks a detailed description of the exact location of these four sectors, making them difficult to find based on the sketch of the site alone.[26]

[25] Núñez Jiménez (1986) considered these sections to be distinct sites.

[26] For reference purposes, I include here a brief description of the location of these sectors: Sector I of this site is located next to the road, as one approaches the town of Chichictara from the south, close to an abandoned, small, modern structure (this structure is indicated in the INC sketch). The rocks on the upper portion of the hill have

Iconographically, there are a wide variety of motifs and stylistically there may be some variety as well. More work needs to be done in this respect. Among the motifs that are represented in all the sectors of Chichictara are a variety of anthropomorphs with different headdress and depicted in different postures (some standing, some seated), bicephalous serpents with round eyes and arrow-shaped heads, and felines (some spotted).

The site of La Viuda, documented by Browne (Browne and Baraybar 1988; Browne 1992),[27] is about 4km downriver from Chichictara Sector I, following the valley's only road. It is located within a *quebrada* that has a series of man-made terraces and a cleared space. The iconography at this site consists of seated figures with headdresses with vertical and horizontal extensions. These figures are depicted on the side of one boulder at the base of the *quebrada*. There are similar depictions of the same type of seated figure in the site of Chichictara as well as at the site of San Marcos in the Aja Valley. Near the boulder with the petroglyphs, but higher on the hillsides, are a *campo aclarado* and some terraces.

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preserved relatively well in comparison to the rocks that are located on the lower part, which now are barely visible. Sector II is by far the one that receives the most visitors, judging from the trails that lead from one engraved rock to another. One can access these from the modern town of Chichictara or through the first large *quebrada* north of the town. Engraved rocks are found on the broken boulders at the base of the *quebrada*, on the hillside, and on the exposed rock on the upper part of the hill. Sector III is located on the hillside that flanks the dirt road, between the first *quebrada* north of the town of Chichictara and the second *quebrada*. There area few modern houses and some pig pens at the entrance of this second *quebrada*, and one can access these engraved rocks by climbing on the hill behind them. Sector IV can also be accessed through this *quebrada* entrance. A trail and a ditch border the hillside north of this *quebrada*, leading directly to the large engraved boulders of Sector IV.

[27] Browne (1992) mentioned an upcoming publication on his interpretations of this site's petroglyphs. However, to my knowledge, this article has not been published yet.

The site of San Genaro was also described by Núñez Jiménez. It consists mostly of lightly pecked anthropomorphs and zoomorphs. Its location is by the Hacienda San Genaro about 1.5 km downriver from La Viuda.

Aja Valley

The Aja River is one of the two rivers that join to make the Nasca River.[28] The petroglyphs of the Aja Valley, east of the modern city of Nasca, are primarily located in two sites: Pongo Grande and San Marcos, although I did not conduct a petroglyph survey of this area and there may be other petroglyph groups nearby. The petroglyphs are located on exposed stone and boulders on steep hillsides. The San Marcos site is located near a series of terraces with tombs. These tombs, now looted, are circular pits lined with stones. The potsherds found in the area were primarily Nasca, especially Nasca 3-5. The style and technique used at these sites is very different from those in Palpa or Nasca valleys. The type of rock is igneous, with a harder surface, and therefore the petroglyphs are barely scratched onto these. Two petroglyphs at San Marcos depict similar seated anthropomorphs as those found at both Chichictara and La Viuda.[29] One of them is particularly elaborate, measuring over 1.30 m and positioned high on a rock wall. There are also other types of anthropomorphic figures, however, some with rounded eyes and extensions emerging from their heads. There are also zoomorphs that have a circular shape drawn within their bodies. The motifs at Pongo Grande include simple zoomorphs and anthropomorphs as well as an elaborate depiction of a lizard.

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[28] The other river is called Tierras Blancas.

[29] The iconography of the Seated Figure Iconographic Complex will be addressed in Chapter 6.

Santa Cruz Valley

The Santa Cruz valley site was documented by Núñez Jiménez, and it is referred to in his study as well as in the maps as La Caseta. It consists of a series of boulders on top of a plateau on the eastern side of the valley. Near the petroglyphs is a plateau with long trapezoidal geoglyphs. The iconography of the rock art at this site consists primarily of anthropomorphs and zoomorphs. Núñez Jiménez, however, did not document all of the site's petroglyphs. On the other side of the elevated plateau, and closer to the geoglyphs, are two petroglyph-covered boulders. One of these depicts two serpents similar to the ones at Chichictara, with arrow-shaped head and with dots aligned down the center of their bodies.

Las Trancas Valley

The Quemazón site is in the Las Trancas River. The petroglyphs are in bad condition today and some are very difficult to distinguish. This is due to the fact that the images are only lightly incised on the surface of the stone. Their subject matter consists primarily of zoomorphs.[30] However, since their condition is very damaged and not much can be made from what remains there today, they will not be used in this study for comparative purposes. Because of this, I have used some of Orefici's drawings of the petroglyphs at this site.

[30] Orefici (1993) provided drawings of additional petroglyphs in the Las Trancas Valley that I did not see during my visit to this valley. These included representations of birds, felines, and other queadrupeds.

Other sites

Orefici (1993) documented some pictographs at the site of Huayhua in the highlands east of the Nasca area, at the base of Cerro Yuraccasa and at approximately 2000 meters above sea level. From the photographs provided by Orefici it appears that the pictographs are in poor condition. He provided some drawings of these, however, depicting anthropomorphs, zoomporphs and hunting scenes. I did not visit this site, and therefore cannot attest for the accuracy of these drawings. More work needs to be done with this site, and the relationship between this and other sites at lower elevations needs to be explored.

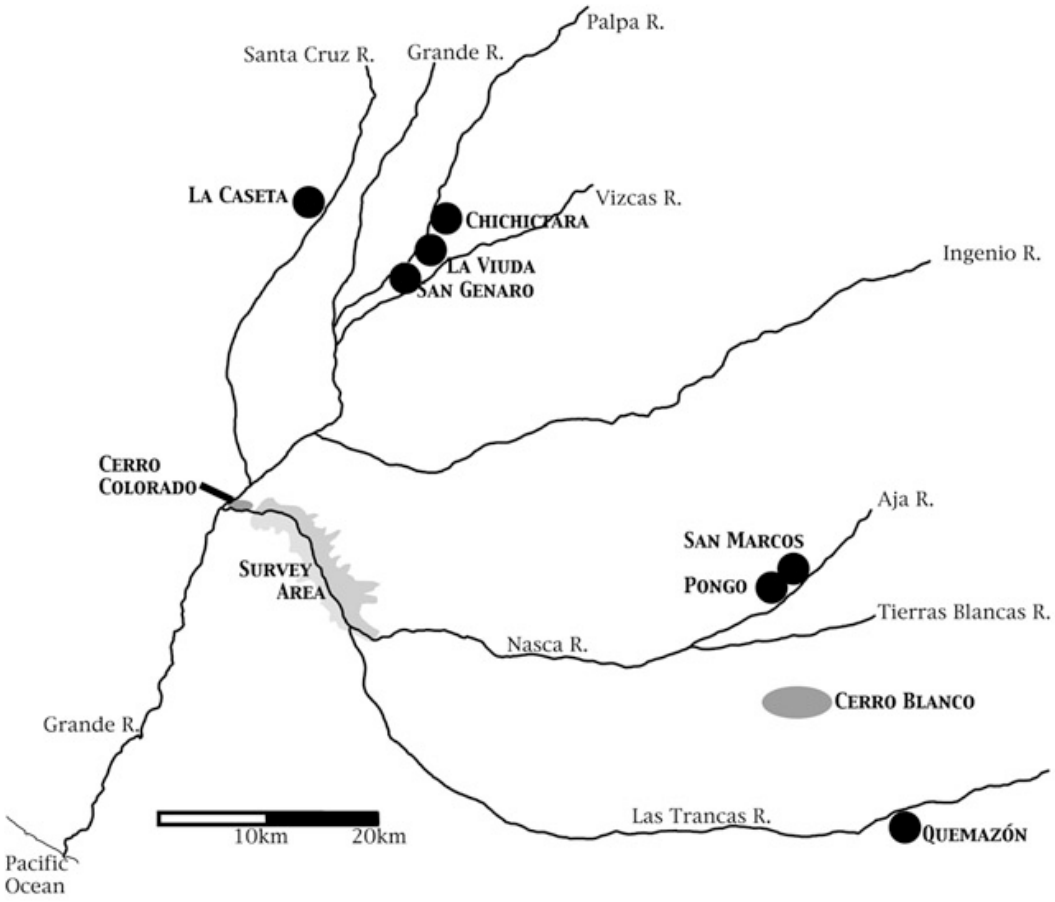

Figure 5.1: Map of the rock art sites of the Grande River System and the survey area.

CHAPTER 6 : TYPOLOGY AND CHRONOLOGY OF GRANDE RIVER SYSTEM ROCK ART

Placing the rock art within the chronological sequence of the South Coast is the first step towards recontextualizing this art form. The fact that most of the Grande River System rock art consists of petroglyphs makes this process problematic, as petroglyphs are notoriously difficult to date. One way to approach this would be to define iconographic types and compare their iconography to other known works from the south coast, ideally works that have been placed within the area's relative chronology. This chapter will serve as the first step towards seeing Nasca Valley sites within the larger context of the rock art sites of this river system. It is of particular importance to be as inclusive as possible in the creation of this typology. For this reason, although the chapter addresses primarily the rock art of the Nasca Valley, rock art from other valleys is also used to create more comprehensive and clearer categories that span the entire Grande River System. Since the groups are defined by comparisons with other media, they by default result in a general chronology.

Geoglyphs are also considered within this typology, as strong correlations were found between the rock art and geoglyphs in this area. Although most publications on the Nasca area geoglyphs tend to reproduce photographs of the same geoglyphs repeatedly, there are a few publications such as those by Kern and Reiche (1974) as well as Reinhard (1988) and Orefici (1993) that include additional and rarely seen photographs and

drawings of representational and non-representational geoglyphs. This chapter uses that material in order to determine stylistic and iconographic relationships between these geoglyphs and the Grande River System petroglyphs. The findings of my petroglyph survey make it possible for me to offer fresh observations regarding the relationship of petroglyphs to geoglyphs in the Grande River System. An unfortunate obstacle is that many publications that focus on the geoglyphs do not have much information regarding their exact location, therefore any conclusions will be somewhat limited by the lack of this crucial contextual information.

Another problem encountered here is the size and quality of the sample in the Nasca Valley. A true seriation based on similarity of features is not fully possible at this time due to the small size of the sample, which makes it impossible to trace individual motifs through time. The associated material at each site is also limited, since few surface remains were found at rock art sites. Furthermore, very few sites were found in reasonable condition during my survey. Most of the petroglyphs found were very eroded and in poor condition. In some cases it was impossible to determine exactly how many figures covered a particular boulder. Rock art sites X14 and X08 are examples of sites where the erosion of the rocks' surface had severely damaged some petroglyphs. At site X14 three anthropomorphs were still clear enough for a tracing to be made from them, while at Site X08 the damage was such that even tracing was not possible. This highlights the urgency of this study, since the Nasca Valley petroglyphs and pictographs that are still visible are fragile and may not be available for future research. The present analysis simply attempts to make sense of the material that is available at this time.

Iconographic Types in the Grande River System Rock Art

The methodology proposed here to determine a time frame for the making and use of Nasca Valley rock art involves (1) assembling all available information regarding the Grande River System's petroglyph motifs, (2) determining figure types through formal and iconographic similarities, (3) comparing these motifs to each other and to works in other media, acknowledging the limitations of such approach, (4) grouping them through these associations, and (5) proposing a sequence for rock art and geoglyph motifs based on these comparisons. This sequence (Fig. 6.1), in rough chronological order, is what is presented in this section. The last groups are more problematic to date and therefore very broad chronological periods, if any, are suggested.

I created these groups based on similarities to works in specific media precisely because many of the comparisons were to Early Horizon materials. Because this is a very problematic period in the South Coast, determining connections to specific types of objects would serve the purpose of maintaining these categories intact as the relationship between these objects is sorted out with more fieldwork and research. As the relationship between Paracas Cavernas and Necrópolis becomes clearer in the field, for example, these categories will still stand regardless of the conclusions reached by South Coast scholars.

The last four groups in this section are not based on iconographic comparisons, however. They are based on formal (Groups H, I and K) or technical (Group J) similarities. The rock art examples within each of these categories shared enough characteristics in common to be considered part of a single group.

GROUP A: Rock Art Related to Initial Period iconography through the Early Horizon phases 3-5 (Lower to Middle Formative)

There is only one petroglyph in the Grande River System that can be securely placed within this category, which includes the related iconography of the Initial Period societies and the Chavín civilization. The transition between the Initial period and the Early Horizon is very complex and involves a lot of interaction between the highlands and the coast (between Cupisnique and Chavín, for example). This time period corresponds to Lumbreras' (1974) Formative.

In the south coast, the earlier phases of the Ocucaje sequence display a strong Chavín influence, as was noted by Menzel, Rowe and Dawson (1964). Silverman (1994) has noted, however, that the Chavín influence was limited to the valleys further north and relatively weak in the Grande River System. Although I did not encounter any Chavin style petroglyphs in my Nasca Valley survey area, there is one petroglyph in the Grande River System that has definite Formative traits. The petroglyph depicts a head in profile on Rock 6 in Sector II at Chichictara (Fig. 6.2). It has a snarling mouth, an eccentric eye, and large fangs. A large fang appears to be located in the central part of the mouth, close to where the nose of the figure would be located. Mouths similar to this one (many of them agnathic, or lacking a lower jaw) first appear during the Initial Period, especially in the central and north coast. A monumental example of this snarling profile can be found at the Cupisnique culture's site of Huaca de los Reyes in the Moche valley (Burger 1995: Plate V). Another large, fanged mouth also appears in the relief frieze at Garagay in the central coast (Fig. 6.3). These characteristics continue to be part of religious iconography

in Chavín art from the Initial Period to the Early Horizon, as this type of mouth and snarl is also found in some of the sculptures at the site of Chavín de Huantar. For example, agnathic mouths with a central fang, located directly below the nose, are also part of the figures depicted in the Black and White Portal and the Raimondi Stela (Fig. 6.4).

The painted Karwa textiles, most of which are reported to have been looted from the Paracas area, also display similar iconographic features, most notably a textile in the collection of the Amano museum in Lima (Reg. #3220; see Fig 6.5). This painted textile displays floating agnathic mouths in profile with large central fangs, similar to the mouth of the Chichictara petroglyph.

There are problems with the "Karwa" materials, however. The provenance of these painted textiles is still a matter of debate. They have received the name "Karwa textiles" based on looters' accounts of where they were found, but archaeological work still needs to verify this. The dating of the Karwa textiles is also a problem. Alana Cordy-Collins (1976 and 1999) argues that these painted textiles belong primarily to Phase D of the Chavín sequence (as described in Rowe 1962), echoing Alan's Sawyer's (1972) conclusions regarding the date of these textiles. A few textiles, she argues, could also belong to Phase EF in the Chavín sequence (Cordy-Collins 1999: 114). This would place the textiles in the Early Horizon Phases 4 and 5. Wallace (1991) had critiqued Cordy-Collins' dating, as he believes these textiles have characteristics of Chavín Phases AB, D, and EF. In fact, the type of mouth on the Chichictara petroglyph is characterisic of Phase AB. What is certain is that the Karwa textiles of the south coast are stylistically and iconographically consistent with Chavín art, and have relatively little to do with the

south coast Paracas tradition besides some minor iconographic similarities (Paul 1991: 23). According to Wallace,

> With a few rare exceptions, the only Chavinoid motif on Paracas pottery is a frontal nonagnathic feline head, which is not common on Chavín sculpture. The rare Paracas profile head has an odd forelimb in front of the face that can be compared only with a figure on the obelisk that holds both hands in front of the face. The few specific Chavín design elements fully integrated into the Paracas style are the eccentric eye with eyelid band, the fanged mouth, the eyebrow band with recurved ends, the paired recurved rays, and the true guilloche. (Wallace 1991: 103)

The Chichictara example therefore would appear to have more in common with Chavín iconography and the Karwa textiles than it does with the South Coast Paracas traditions, which define the next few iconographic categories. It is therefore necessary to place it within its own category. Silverman (1991), in fact, calls this particular petroglyph "the southernmost coastal expression of Chavín iconography." At the same time, considering the complex relationships between coastal and highlands iconography in the Formative period, which encompasses the Initial Period and the Early Horizon, the Chichictara petroglyph is also part of the larger Initial Period iconographic complex that informed the iconography at the site of Chavín de Huantar. The outlined lips, fangs, and nostril curl are similar to those depicted on the friezes at Garagay as well (Fig. 6.2). Burger and Salazar-Burger (1998) identfy the depiction of enlarged upper incisors as typical of central coast Initial period, not Chavin, religious iconography.

Although this is a single petroglyph within the Grande River System, comparisons could be made between it and several petroglyphs at the rock art site of Huancor (Fig. 6.6), in the San Juan Valley on the northernmost portion of the Department of Ica (This is the valley that forms the Chincha Valley as it splits into two branches close to the coast;

see Fig. 1.1). This site of Huancor seems too far north for any direct connection to exist between it and the valleys of the Grande River System. However, there are more than a few similarities in the iconographic types found in both areas. At Huancor, at least two petroglyphs display Chavinoid traits. One consists of a frontal face with crossed fangs, lobed ears and a triangular hat. The other consists of a standing, frontal figure with a headdress designed with modular bands. On this figure, two bands braid into each other in the headdress. This forms the guilloche mentioned by Wallace, a type of motif that represents hair in Chavín de Huantar relief sculpture and is also found along the back of the Lanzon sculpture at Chavín de Huantar. A less complex figure also at Huancor displays the same type of headdress braid. So, although the presence of a chavinoid petroglyph in the Palpa Valley is a single occurrence within the Grande River System, slightly further north there are other examples of the Chavin style and iconography in both textiles and rock art sites. Aside from Huancor, Chavín rock art is largely located in northern Peru, in the departments of La Libertad (Nuñez Jiménez 1986) and Cajamarca (Mejía Xesspe 1985).

GROUP B: Rock Art Related to Early Horizon Resin Painted and Incised Ceramics – Paracas Cavernas / Ocucaje (Early Horizon 8 – 10)

One distinct type of figures consists of anthropomorphs that wear a bifurcated headdress. Unfortunately in my survey area such anthropomorphs are in poor condition, largely due to the fact that they were lightly pecked on rock surfaces that have since eroded. There are five clear examples of these anthropomorphs in the Nasca Valley: Feature A in Site X03's Rock 1, Features D, G, and M in Site X02's Rock 4, and Rock 1's Feature B in Site X14 (Fig. 6.7a-e). With the exception of Site X14's example, the

bifurcated headdresses consist of two pairs of lines that emerge from the top of the figure's head, eventually curving downward, two at each side of the figure's head. The example of Site X14 (Fig. 6.7e) only has one line curving downward at each side of the figure's head.

Although the bodies of the Site X02 figures have eroded beyond any recognition, the other two examples have relatively intact bodies that show some variation in the manner in which they are depicted. Feature A in Site X03's Rock 1 (Fig. 6.7d), for example, has a rounded body with projecting appendices and one of its legs is clearly shown ending in a foot. This figure holds a round shape in its left hand. This is a rare figure, as it is depicted with breasts. These are shown as carved, round, incised areas in the chest. This is one of only three figures that have obvious female attributes in the Nasca Valley survey area.[31] Site X14's Feature B on Rock 1, on the other hand, has a rectangular body and no sex indicators. It is impossible to determine whether this figure ever had any breasts shown on its chest. A navel marking has been clearly indicated in the lower part of its torso (the two other figures shown on this same rock also display these navel markings).

In the Nasca Valley survey area, anthropomorphs with bifurcated headdresses are distributed primarily in the Central Area. The highest concentration at one site is three (at site X02). However, there are also examples of this same type of headdress in other

[31] The other two are Feature A in Panel B at QMA01, which also has breasts, and Feature 1X in Site X02's Rock 1, which is shown with an enlarged pudendum, although neither of these have bifurcated headdresses. Male indicators are equally rare in the survey area: two examples of anthropomorphs with clearly indicated phalli are Features C and D in Site X02's Rock 3. Although most of the anthropomorphs in this area seem to be asexual, Site X02 in particular appears to have gendered associations to the iconography.

valleys throughout the Grande River System. At the Palpa Valley site of Chichictara there are two more examples (Sector III, Rock 32 and Sector II, Rock 41, see Fig. 6.8). In both of the Palpa examples, the headdress consists of three lines as opposed to the two used in the Nasca Valley. An additional bifurcated headdress figure is also found in the Aja Valley, at the site of San Marcos. The figure is therefore widely distributed and is represented in petroglyphs throughout the entire river system.

There is a geoglyph reproduced in a photograph by Kern and Reiche (Kern and Reiche 1974: Fig. 134) that includes a geoglyph of an anthropomorph that also belongs to this group, wearing a bifurcated headdress (Fig. 6.9). Although the photographs are dark, a later drawing published by Orefici (1993: 223), apparently from a different photograph,[32] clearly shows this figure with two round shapes as breasts on its torso. This indicates that this geoglyph and Site X03's anthropomorph belong to the same type.

The closest comparative examples of these figures are depicted on Paracas resin-painted or crusted pottery. This includes what is known as Paracas-style Paracas (Cavernas and the Ica Valley's Ocucaje), as opposed to the Paracas-Necrópolis or Topará tradition of ceramics (Paul 1991; Silverman 1991). Menzel, Rowe, and Dawson (1964: Figs. 44 and 52) include two drawings of Ocucaje 8 and 9 figures with a similar headdress (Fig. 6.10a-b). In the case of the Ocucaje 8 example, the projections that emerge from the figure's head are divided into bands. These bands echo the use of two or three lines on the bifurcated headdress figures found among the petroglyphs. The use of bifurcated forms emerging from a figure's head however is not unusual among

[32] The photograph from which the drawing was made is not reproduced in Orefici's publication.

representations of the Oculate Being and many figures in Necrópolis embroideries as well. These Ocucaje examples are formally the closest to the examples shown in the rock art, however.

There is some evidence of superimposition related to these figures found at survey site X02. Rock 4's petroglyphs, including examples of the anthropomorphs with bifurcated headdresses, appear to be pecked over a painted surface, and perhaps over earlier Group J pictographs. This indicates a definite sequence for these two types. However, as this is the only site in the Grande River System that has both of these types present, this conclusion is tentative.

Another important motif within this group consists of representations of felines, although these are very different from the felines described in Group C. Group B felines are specifically located in the Palpa Valley site of Chichictara[33] and at the Las Trancas Valley. Another possible example is in the Santa Cruz valley. The bodies of the Group B felines are often decorated with spots and their legs and tails are often outlined and divided by small, parallel segments or bands (Fig. 6.11). Their tails curl and point downwards. Their heads are either rectangular with small, triangular ears, or consist of a main rectangular shape with two small lines as ears projecting from the two uppermost corners. The bodies have a predominantly rectangular shape, although some display rounded backs.

[33] Although there are other quadrupeds that may represent felines at Chichictara, the following examples are characteristic Group B felines at the site of Chichictara: Sector II's Rocks 26, 44, 50, and possibly 42, and Sector IV's Rocks 02, 08, 16, 19, 20, 22, "x" (which appears to be incomplete from the INC drawings), and "y" (which lacks a face).

On one example (Fig. 6.11b) at Chichictara, the spots on the body of a feline are depicted as a circle with a central dot (Sector IV, Rock 02). These same spots are found on this site's petroglyphs of double-headed snakes with triangular heads. This is the circle and dot motif mentioned by Reindel and Isla (1999) as evidence for an early date of the Chichictara petroglyphs, since Paracas Cavernas or Ocucaje ceramic vessels are sometimes decorated with this motif as a pattern. Silverman (1990: Fig. 9.11) reproduced examples of Ocucaje 8 bowls from the Nasca Valley site of Cahuachi that display this same motif. This motif is also present in contemporaneous Chavín culture Janabarriu phase pottery (Burger 1995: Fig. 169). These types of circles with spots can also be found depicted as decorations on the bodies of Chavín serpents and felines at the site of Chavín de Huantar. They are also hinted as patterns made through tie-dying or resist on the chavinoid Karwa textiles. Although circles with a central dot have been used as ceramic decoration for a long period of time and across a wide area, it is the use of these patterns in combination with the feline and serpent iconography that links these petroglyphs to Formative material. Locally these patterns are also typical of late Early Horizon ceramics.

The banded tails and legs shown on these felines resemble those shown on felines of Ocucaje resin-painted or crusted ceramics. Although felines are depicted on ceramic vessels throughout the Ocucaje sequence, the banded or segmented tails and legs as well as the small, triangular ears on rectangular heads of the Chichictara felines have more in common with Ocucaje 8 through 10 felines than any earlier version (Fig. 6.12). Often the bodies of these felines are spotted as well.

Some petroglyphs in the Las Trancas Valley also depict spotted felines similar to those in Chichictara (Fig. 6.13). The Las Trancas felines also have long, mostly rectangular bodies covered with spots. One example clearly displays outlined legs and tail, all of which have been decorated with parallel bands. At Santa Cruz Valley's La Caseta site, one feline (Fig. 6.14) is a bit more problematic since it seems to combine aspects of Group B felines and Group C felines. It is however in close proximity to the representations of snakes that resemble those at Chichictara. At the site of La Caseta, the serpents are pecked on a boulder that was not included in Núñez Jiménez's documentation of this site. The petroglyphs consist of two snakes, one of which clearly has a triangular head, with circular spots lining their bodies, closely resembling the Chichictara snakes mentioned earlier.

Another figure type that belongs to this group consists of a geoglyph (Fig. 6.15) made using a combination of additive and subtractive techniques. This means that stones were piled to form the main figure, but the areas around it were cleared. This geoglyph is the one that Silva Santiesteban (1991) described as a "fetus." Orefici (1993: 250) compared the first geoglyph to the figures on the painted mantle of Paracas Fardo 290, originally published by Tello and Mejía Xesspe (1979). The geoglyph, however, is closer to Ocucaje 10 representations of the Oculate Being (Fig. 6.16), closely matching the description provided by Menzel, Rowe, and Dawson (1964: 239-244). The head of this figure is usually turned upwards and has the characteristic large eyes and smile, it often holds what appears to be a trophy head in one hand (although not in the example

seen in Fig. 6.16), and many streamers with serrated edges emerge from its body. One of these streamers clearly ends in a head.

One interesting aspect of having this material which is comparable to Ica Paracas-Ocucaje ceramics is that relatively few examples of Paracas pottery have been recovered from the Grande River System. Silverman (1991) has provided a comprehensive survey of Paracas material that has been documented in this river system thus far, and there is very little material available.

GROUP C: Rock Art Iconographically Related to Paracas Cavernas Textiles, or to Paracas Necrópolis Linear Style Embroideries (Early Horizon 8 – Early Intermediate Period 1)

This iconographic group consists of rock art comparable to Paracas Cavernas textiles and Paracas Necrópolis Linear Style of embroideries. I place these two textile styles together because Necrópolis Linear Style of embroideries resemble and imitate the appearance of the earlier Cavernas structurally woven designs. It is therefore impossible to determine whether the association of the rock art is to one or the other. As discussed in Chapter 3, the relationship between Cavernas and Necrópolis is still a matter of debate. Although one predates the other, they have been found together archaeologically and may have been contemporaneous. Therefore, although Group B and Group C felines are comparable to different material, there is a possibility that they may have been contemporaneous.

Feline iconography from the Nasca Valley constitutes an iconographic type within this group. In the Nasca Valley it can be found in petroglyph sites X02, QMB03, QMA01 (Proulx's RN49), QMC14, and X09 (Fig. 6.17-6.19). Although a few examples

differ slightly in form, these felines tend to have large triangular ears[34] that emerge dramatically from an oval or rounded face. This is distinct from Group B felines, who have smaller triangular ears emerging from rectangular faces. The tails of Group C felines curl either upwards or downwards and they are not segmented or banded. Legs are drawn as four individual lines, or as two outlined shapes. Their bodies have rounded backs and the bottom portion of the body is flat. In three cases (Feature 2R and 2L in Site X02's Rock 1, Feature B in Site X09) there are small, carved dots on their bodies.

A significant trait for this type is an extension that emerges from the mouth area or chin, imitating the shape of a tongue. Tongue extensions are present in 6 out of the 13 felines found in the Nasca Valley, and on one small creature depicted next to a large feline in QMC14's Rock C (Fig. 6.18). This tongue extension, when present, often ends in either a face or a series of rayed lines. At site QMC14, the extensions end in a circular shape with human facial features drawn within it, as well as radiating lines on top of the circular shape (perhaps hair). At Site X02, the extension simply turns into a pattern of radiating lines. Site X09 has one feline with this extension. In this case, the extension has small, appended lines drawn to it, and ends in a circular shape with rays around it. Finally, at site QMA01, one feline has a curved line that emerges from its chin but it does not end in a head or any other motif.

The Quebrada Majuelos sites, however, also have a few representations of felines that differ slightly from the aforementioned description. At Site QMA01, motif H in

[34] Motif 2R in Site X02's Rock 1 and Drawing 4 at Site QMB03 have ears that have been squared off.

Panel C has a longer body. Site QMB03's drawing 4 is a petroglyph of a feline with rectangular ears, four marks under the chin and a long tail that points downward.

Nasca Valley felines are quite similar to representations of felines found in Linear Style Paracas Cavernas and Necropolis textiles.[35] These Linear Style Paracas motifs also display large, triangular ears and a long tail. The long tail is usually not segmented. If bands are present, they run parallel to the shape of the tail emphasizing its length instead of dividing it into segments. The textile examples, many of which have frontally depicted facial features that resemble those of the Oculate Being, also have the elongated, tongue-like element that emerges from the chin of the feline's face. Figure 6.20 shows an illustration of a creature with a feline body and an Oculate Being head with a tongue extension. Around this larger figure there are smaller felines with large, triangular ears. In Linear Style embroideries, other elongated extensions sometimes also emerge from the top of the heads of these felines. These extensions always end in a representation of something else, either a head or another feline. This is something similar to the iconography that is evident at site QMC14.

Although the ceramics of the Nasca culture also include representations of felines with tongue extensions, these tend to end in clearly depicted vegetables and fruits. These felines' heads usually have an ornament or headdress and they do not have the triangular ears that the petroglyph felines have. Overall, they are more detailed and ornamented.

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[35] These representations of felines in Paracas textiles are part of Massey's Phase 3 of Paracas art (Massey 1991: 240) or Menzel, Rowe and Dawson's Ocucaje 9 (Silverman 1991: 378)

GROUP D: Rock Art Iconographically Related to the Oculate Being as depicted on Ocucaje Painted Cloth Mummy Masks (Early Horizon 9-10)

Although only one petroglyph in the survey area belongs to this category, its unique associations pose some problems that are best avoided by making it its own group. The petroglyph in question is the figure that is found on a large boulder at the Nasca Valley Site X12 (Fig. 6.21). The head of the figure is rectangular, with small vertical marks lining the upper portion. Its large circular eyes and smiling mouth are reminiscent of the Paracas Oculate Being, especially those painted on mummy masks found at the site of Ocucaje, in the Ica valley. The nose is particularly interesting since it descends from the top of the head as a triangular shape, eventually becoming elongated as it takes its position at the center of the face. Noses on Oculate Beings from Ocucaje 9 and later are known as pendent noses and also descend from the top of the head.

By far the closest example to the X12 Oculate Being is found on a painted textile reproduced by Bird (1954: Pl. LXIX). The Oculate Being represented on this textile (Fig. 6.22) has a different head shape, tapered at the bottom, but the upper portion replicates the X12 figure almost exactly, including the small vertical lines lining the upper portion of the head, the pendent nose, and the large Oculate Being eyes and smiling mouth. Both the petroglyph and the painted example also have small parallel lines emerging from the lower part of the figure's jaw. Furthermore, the Oculate Being in the painted example is surrounded by elongated appendages that are lined with triangular shapes, similar to the single extension that descents from the side of the Oculate Being's head in the X12 petroglyph. Bird associates this particular textile to similar painted textiles found as false mummy bundle heads in Paracas graves at the site of Ocucaje (Bird 1954: 69).

Associations to death and burials are particularly interesting given the fact that the X12 petroglyph faces one of the largest cemeteries in the Nasca Valley, Proulx's RN24. RN24 is a multi-occupational cemetery with remains from the Early Intermediate Period and Late Intermediate Period.

Dawson (1979) made a study of these Paracas painted mummy masks and established a seriation of the available examples and concluded that these painted mummy masks date to Ocucaje 9 and 10. The previously mentioned Bird example, or one remarkably similar to it, is featured in a photograph reproduced by Dawson in association to some Ocucaje ceramics that were found with it (Dawson 1979: Fig. 18). Dawson dates this particular example to Ocucaje 10 and uses its traits to define the characteristics of this phase. Among these traits are the depiction of the figure's body underneath the head of the Oculate Being, the use of angular lines (as opposed to the earlier curvilinear lines) to draw the figure, and the use of jagged borders on the bodies of the snakes that are appended to the Oculate Being. These traits are present in the petroglyph as well, although the petroglyph is not as angular as the painted mummy mask. The painted mummy mask seems to replicate its Paracas Linear Style sources more closely than the petroglyph.

Another difference between the textile example and the petroglyph is that the body of the X12 Oculate Being consists of an elongated shape divided into three bands, with a central line of circles. Although the triangular projections and longitudinal banding are present in Ocucaje examples, the central row of circles can be found in Nasca 3 and 4 representations of the Serpentine Creature, Mythical Killer Whales, and

Anthropomorphic Mythical Being. The central row of dots, to my knowledge, is not present yet in Paracas Cavernas iconography, although rows of connected forms are present on some Necropolis figures. This is probably one of the earliest appearances of this type of decorated body. Yet another possibility is that the body of the figure was added at a later date to the petroglyph depicting the face of the Oculate Being.

Surface potsherds were not found near the petroglyph itself, but there was a group of broken ceramics that post-date the petroglyph about 200-400 meters away, dating from the Early Intermediate Period (Nasca) and Late Intermediate Period. I did not encounter any sherds that are consistent with the proposed dates of the petroglyph, however.

Problems with this figure do not end here. According to Dawson (1979), the Ocucaje 10 masks became more angular in appearance since the style of the paintings began to resemble the Linear Style of embroideries. We therefore would have a relationship between this figure type and Group C. However, the Oculate Being also appears in Paracas Cavernas resin painted ceramics, so there is also a relationship between this figure and Group B as well. In fact, one geoglyph in Group B clearly depicts the Oculate Being. However, perhaps due to the freer execution of the lines, this petroglyph is closer in style to the Oculate Beings on the painted mummy masks than to any other representation of this figure. At the same time, these groups (Groups B, C and D) may have coexisted during phases 9-10 of the Early Horizon.

Group E: Rock Art Iconographically Related to Paracas Necrópolis Block Color Embroideries (Early Horizon 10 – Early Intermediate Period 2)

The iconography of the petroglyphs and geoglyphs that belong to this group is comparable to Necrópolis Block Color Textiles. Chronologically, this places this group

slightly later than the preceding three but there is still the chance that Group E rock art was contemporaneous to the preceding three during the very end of the Early Horizon. Although the development of the Linear style precedes that of the Block Color style, Linear and Block Color embroideries are believed to have been used simultaneously starting in Early Horizon Phase 10B. In her study of the development of Paracas textiles, Anne Paul found that Necrópolis Linear Style of embroideries were found in mummy bundles that dated to the Early Horizon Phase 10A. Starting with Phase 10B, mummy bundles contained both the Linear Style and the Block Color Style (Paul 1982: 268).

Group E petroglyphs are concentrated in the upper valleys (Aja and Palpa, both of which are further upstream in the Grande drainage) and none of these figure types were found in the Nasca Valley survey area.

Among this group's geoglyphs is one example representing a standing figure with streamers (Fig. 6.23). This figure can be compared to several Block Color Paracas Necropolis embroideries. Its scalloped headdress resembles the figures drawn by Tello (1959: see Lamina XXXIX), taken from Fardo 451 (Fig. 6.24). The streamers are found in many Necropolis embroidered figures. These usually emerge from the back of a figure and end in a head (Peters 1991: Fig. 7.79), not unlike the previously described Oculate Being representations. In the case of the geoglyph, the streamers also appear to end in small heads.

Another motif that could be dated to this period is feature 2D of Site X02's Rock 1 (Fig. 6.25). This isolated head is drawn sideways, with large, round eyes and hair that extends outward as parallel lines. This closely resembles the many Paracas Block Color

and Broad Line embroideries representing skeletal figures with long, flowing hair (Paul and Turpin 1986: 24).

One motif at Chichictara, found on Rock 43 of Sector II (Fig. 6.26), is clearly related to Necrópolis Block Color iconography. It depicts a figure holding an object that resembles Paracas trophy heads with extended hair. This figure is similar to depictions of anthropomorphs that hold trophy heads on Paracas Necropolis embroidered textiles. The posture, with an extended body but its head at an angle, also resembles many Paracas Block Color figures that have been described as falling or flying such as those mentioned above by Paul and Turpin (1986). The head of this petroglyph figure, however, does not resemble anything seen in Paracas Necrópolis iconography, although the large round eyes could refer to the Paracas Cavernas Oculate Being.

Also part of Group E is what has been labeled here as the Seated Figure Iconographic Complex. This iconographic complex is particular to the upper portions of the valleys in the Grande River System, such as Palpa and Aja. The attribution for this iconographic complex to this particular group can be explained through a comparison of these figures to the previously mentioned petroglyph at Chichictara, Sector II, Rock 43. The extended posture of the Rock 43 figure and its association to a head with flowing hair links it to Paracas Necrópolis textile iconography. The figure on Rock 43 also happens to have an X on its lower body. The shape of the head is semi-circular with small lines around its perimeter. It also has horizontal extensions at the sides of the head and a similar extension emerging from the top. These traits link this figure to those at the site of La Viuda in the Palpa Valley.

The La Viuda examples (Fig. 6.27) are quite detailed and will be used to define this figure type. They are shown holding a long object on one hand and possibly a smaller object on the other. They are seated on a rectangular shape with their legs to one side. Their seat displays an X-shape within it. In the case of the La Viuda anthropomorphs, figures have a headdress that consists of a vertical element on the top and a horizontal element at each side. Both of these last two traits are reminiscent of Rock 43 in Sector II of Chichictara. Two of the La Viuda figures wear necklaces and have large, round eyes, like those of the Rock 43 figure.

I have labeled this type as the Seated Figure Iconographic Complex. Figures belonging to this Iconographic Complex are primarily found among the upper valleys of the Grande River System. The main characteristics of this complex include the seated position and the X on the seat. The headdress changes from figure to figure, sometimes having the vertical and horizontal extensions like the La Viuda examples, other times having a semi-circular shape. The degree of detailing of the figures' anatomy or dress is also variable.

By far the largest example of the Seated Figure Iconographic Complex is found at the site of San Marcos in the Aja valley (Fig. 6.28), where a figure corresponding to this type has been drawn onto a large flat panel of stone. It measures approximately 1.5 m high. Beneath the figure are representations of camelids. In the case of the San Marcos example, the figure has a large semi-circular headdress and its body is decorated with a chevron pattern.

One geoglyph reproduced by Kern and Reiche (Kern and Reiche 1974: 130) can be attributed to this phase based on iconographic similarities to the Seated Figure Iconographic Complex. It is not clear whether this figure ever had an X on its "seat," but it is shown seated on an elongated shape, holding long objects that may be staffs. Its headdress resembles those found at La Viuda.

At Chichictara, other clear examples of figures belonging to the Seated Figure Iconographic Complex include Rocks 13 (Fig. 6.29) and 57 in Sector II and Rocks 30, 30B, 32, and 33 in Sector III. Three examples that could be related are Rocks 19 and 46 in Sector II and Rock 22 in Sector III, but they only have one or two traits that link them to the iconographic complex. There are also other examples with figures that display the headdress consisting of one vertical element and two horizontal elements at Chichictara, although it is difficult to argue that all of these are linked to this iconographic complex based on this trait alone. At San Marcos, and very close to the large figure described above as belonging to the Seated Figure Iconographic Complex, there is a smaller petroglyph with the same chevron motif on its body as the larger one. Obviously this figure is associated to the larger figure, but does not display other characteristics that place him within the Seated Figure Iconographic Complex.

The Seated Figure Iconographic Complex can also be compared to representations of seated figures at the site of Huancor in the San Juan Valley (Chincha, see Fig. 6.30). Although this seems to be too far north for comparisons to be made, there are several similarities between the rock art at this site and the rock art in the Palpa and Aja Valleys. For example, at Huancor there are several depictions of seated figures, suggesting that

this posture may be one of the significant traits of this iconographic complex. Additionally, many figures at Huancor also display a chevron motif decoration on their bodies, also found in the Aja Valley.

The figures of the Seated Figure Iconographic Complex belong to this particular group due to their association with Chichictara's Rock 43 in Sector II, which has traits that link it to Paracas Necrópolis embroidery iconography. Among these traits is its posture, as well as the trophy head with flowing, long hair. Additionally, there is a link between the geoglyphs in this particular group, as the Seated Figure Iconographic Complex example is on the same area as the geoglyph described as having Paracas-Necrópolis iconography.

GROUP F: Rock Art Iconographically Related to the Nasca Culture (Early Intermediate Period, although some may be as early as Early Horizon 10)

At Sites QMA01 (Proulx's RN49) and X02, there are examples of the Mythical Killer Whale, a figure that has been assumed to be one of the principal Nasca religious beings. Yacovleff (1932) first identified this creature in Nasca ceramics as an orca due to the spots drawn on the animal as well as the dividing line of color along the middle of its body. He argued that this was the principal Nasca deity. Regardless of its orca-like attributes, however, this figure is a composite creature as it has a human arm. According to Lyon (1978: 126) this creature's combination of traits can be explained if it is interpreted as the Master of the Fishes. In her study of Nasca figurines, Morgan (1988) argued that the appearance of this Master or Mother of Fishes in association to these figurines related to the latter's role as fertility offerings to this marine deity. Carmichael expands on this, arguing that the Nasca "Killer Whale" is not a specific reference to the

ocean or sea life, but is part of a "continuum expressing agricultural fertility concepts" (Carmichael 1990). For simplification purposes I primarily use the term Mythical Killer Whale in the present chapter. In Chapter 9, however, I propose using a different name for the identification of this figure: The Nasca Aquatic Composite Being. I argue in Chapter 9 that the figure is not specifically an orca and combines traits of many animals, including sharks, and I also examine its relationship to place based on the petroglyph and geoglyph representations of this motif.

At QMA01 (Proulx's RN49) I labeled the large marine animal as Feature A on Panel F (Fig. 6.31). Proulx identified this large Mythical Killer Whale as Nasca in style due to the similarity between this representation and those on Nasca 3 pottery. Proulx's description of this motif states that this creature

> faces to the right, with the large flaring tail pointing roughly north. The midline of the creature is decorated with a series of linked circles or balls. A human hand protrudes from the animal's lower body, thus indicating that it is a sacred animal rather than a naturalistic representation. (Proulx 1999: 58)[36]

In addition to the information provided by Proulx, it is important to mention other details regarding the iconography and form of this petroglyph. The midline of the figure is not the only line that decorates the body of this creature. In fact, three lines run along its body, making four bands. Two of the circles that Proulx mentions are located on the horizontal portion of the body, while a third one, noticeably different, is located closer to the tail. This third "circle" is actually elongated, resembling an "eye-navel" commonly found on the torso of the Nasca Masked Mythical Being (Nieves n.d) that date from

[36] The text cited here comes from the original English version that was eventually translated into Spanish for the Instituto Nacional de Cultura report.

Nasca Phases 3-5. The head of Feature A has a rectangular snout and a large circular eye. An elongated ear also protrudes upward. Below the chin is a hook-like extension.

There is another, smaller, Mythical Killer Whale (or Aquatic Composite Being) in the space between the upper fins and the tail of the larger Feature A. This is labeled Feature B (Fig. 6.32). There are several similarities between Features A and B: they both have rectangular heads, elongated ears, and a banded body. They also face the same direction and the curvature of their bodies mirrors each other's. Feature B is a simplified version of the larger figure, with similar proportions.

Two more examples of Mythical Killer Whales (or Aquatic Composite Beings) are found in site X02, both of which have different iconographic characteristics. Rock 04 at this site has a small Mythical Killer Whale facing left, Feature Q (Fig. 6.33). In this case the body has a single line dividing it into two bands. Below the body is an extension that could be a human arm, similar to Feature A in QMA01's Panel F. Finally, this particular Mythical Killer Whale's mouth is lined with triangular teeth much like other versions of this motif depicted on Nasca ceramics.

There is another marine animal, Feature 1Y on Rock 1 of Site X02 (Fig. 6.35). It does not have a human arm, triangular teeth, or banded body. It is an incomplete drawing, as the figure stops when it reaches Feature 1X, the anthropomorph with the enlarged pudenda. The mythical whale therefore appears to have been carved after the figure with the large pudenda. On the other hand, there is also an incomplete feline over the head of the marine animal. The feline head is very lightly incised compared to the other representations of felines on this same rock as if this image started to be plotted but

was never fully executed. This is the only example of a marine motif in the Nasca Valley that does not have clear Nasca stylistic traits.

In addition to these Myhtical Killer Whales (or Aquatic Composite Beings) there is also a large fish or shark that is found in Panel E of site QMA01 (Fig. 6.34). Its banded body, large circular eye, triangular fins, as well as the technique used in its manufacture (deep, carved lines) resemble those on the large Mythical Killer Whale (or Aquatic Composite Being) at this site.

Marine iconography is not found elsewhere in the Grande River System rock art sites. However, several marine representations are present among the area's geoglyphs (Fig. 6.37). These are found primarily on the Nasca Pampa, although there is also one documented example in the Palpa Valley. During this Early Intermediate Period, there is a distinction between form and function of geoglyphs in the Nasca area. Geoglyphs that have been attributed to this period include those made with continuous, unbroken lines and designed around modular widths.

The disjunction between the form and function of the petroglyphs and geoglyphs during this phase is evident in the manner in which the marine animals are drawn. The petroglyph versions are closely tied stylistically to the examples on Nasca pots. The pot reproduced in Figure 6.36, for example, also displays the same shape of the head as Feature A of QMA01's Panel F. It also has a pointed ear and a hook under its chin. Its body is also banded.

Among the marine animal geoglyphs, a single, unbroken line is the preferred manner to depict these animals and this is a very different approach than the additive and

subtractive combined technique used in the geoglyphs that fall under Groups A through E. This change in the way the geoglyphs are drawn is probably based on a change in function of the geoglyphs at this time. Scholars have suggested that this particular type of geoglyph may have served as a ritual pathway, although there are some similarly made geoglyphs that are too small to have served this function (Kern and Reiche 1974: Figs. 136 and 137).

Through its association to the marine motifs at QMA01 (Proulx's RN49), another figure type that likely belongs to this group is a tooth-shaped anthropomorph or full-bodied trophy head.[37] This particular type can only be found at this site and is associated to the small Mythical Killer Whale (or Aquatic Composite Being) mentioned above since they are all made with the same, lightly incised lines and are found in close proximity to each other. This anthropomorph has a rectangular head with vertical parallel lines projecting on top of the head. Its mouth consists of a horizontal line with smaller vertical lines projecting down from the horizontal line or going through it. Eyes are made with small circles that have not been hollowed out. The body consists of an elongated shape that ends in two triangular projections. No feet are indicated. The best examples of this figure type are Feature A in Panel B and motif B in Panel H. Feature E in Panel B corresponds to this type as well due to the shape of the head and its facial characteristics, although its body is missing. These are all lightly incised on the surface of the rock. In the cases of Feature E and Feature A of Panel B, the figure appears to hold an object in one extended arm. One last figure at this site that is related is Feature E in Panel C.

[37] Illustrations of this figure are found on Chapter 9: Fgures 9.16 and 9.17.

Although there are some aspects of this figure that differ slightly, such as the dome-shape of the head and the longer vertical lines that top its head, it too is made in the same lightly incised technique. Furthermore, it also holds something in its left arm, but this time it is clear that the object it holds is a smaller figure. It is difficult to determine whether Panel B's Feature A and Feature E in Panel E held a smaller figure as well, but this is likely. These figures also have vertical lines descending from or crossing their mouths. This trait is reminiscent of the lines that cross the mouths of trophy heads in Nasca art. This particular type is not found elsewhere in the survey area, nor is it found anywhere else in the Grande River System.

Finally, spiral petroglyphs are interesting because they are concentrated on one petroglyph site, X03 (Fig. 6.38). They are found on upper portions of three rocks (Rocks 2, 3, and 4) that are in close proximity to each other, lightly incised on their surfaces. In the case of Rock 2, additional lines parallel the contour of the rock itself as well as continue the curved shapes of the spiral. No other spirals are found elsewhere in the survey area, and they are equally rare in the rest of the Grande River System.[38] It is also important to mention that spirals are quite common among the area's geoglyphs, both on the *pampa* as well as in the Palpa Valley. Because they are on top of flat stones, instead of on the sides, one has to look down at them in the same way one would look at a geoglyph. The only difference between these examples is scale. Although rayed shapes,

[38] There is one spiral at Chichictara, done on the side of a boulder and adorned with small spots. Other than that, I have no knowledge of any other spirals in Grande River System petroglyphs. Further north, in the Chincha area, there is another spiral at the site of Huancor.

spirals, and zigzags are found among the geoglyphs, a direct relationship between these motifs in both art forms cannot be established at this point.

GROUP G: Vulva Designs (Unknown date, possibly Early Intermediate Period 5)

It is likely that the many petroglyphs of female genitalia in the Nasca Valley also belong to this period (Fig. 6.39). Sexual indicators such as breasts or phalli on depictions of anthropomorphs are rare in the Nasca Valley, but Figure 1X on Rock 1 of Site X02 is clearly female. It is the only figure in the survey area that is shown with an enlarged pudendum. In this case, the pudendum is depicted as a rectangular shape with a carved oval in the center, and this is comparable to a similar figure on Rock 11 of Chichictara in the Palpa Valley. Similar pudenda also occur on their own as separate motifs in the Nasca Valley. These are usually depicted by carving out a rectangular shape with rounded corners or an oval, and either carving a hollow circular area or incising a line in the center. The female genitalia motif is distributed throughout the Central Area of my survey, with a particularly large concentration at sites X02 and RN50. Interestingly, this motif is not as prevalent anywhere else in the Grande River System, the only exception being the aforementioned petroglyph at Chichictara. Examples of female genitalia are found in sites X02 (Rocks 1 and 4), X12, RN50 (Rocks 1, 2, and 4), QMB03 (Drawing 3), and QMC14 (Rock D). In the last two examples, the motif is not as apparent because it has been lightly incised on the rocks' surfaces with thin lines. In the survey area, these depictions of female genitalia are usually in the same sites that have Group B, C, and D petroglyphs. All of which have been linked here with Early Horizon iconography. However, representations of isolated genitalia are found only in south coast art in Nasca 5

ceramic iconography. This would make the petroglyphs comparable only to middle early Intermediate Period material. At the same time, it is important to mention that petroglyphs that have female genitalia are considerably earlier in other parts of the continent (Grieder 1982: 23).

GROUP H: Grooves [and Pits] (Unknown date: Middle Horizon or Late Horizon?)

Given the similarity among groove petroglyphs in my survey area, they are likely to belong to one phase of petroglyph-making activity. The problem is where to fit them into this sequence, as they are non-representational. Due to their shared characteristics, Groove petroglyphs deserve to be treated as one group. These petroglyphs are lines and zigzags or other simple shapes deeply carved on inclined rock surfaces (Figs. 6.40-6.44). In the Nasca Valley, they are particularly common in Northern Cluster sites (all Northern Cluster sites have them) but they can also be found in three Central Area sites. These grooves usually measure about 3 cm wide and their depth often measures between 1 and 2 cm. Intricate Groove Style petroglyphs, such as very angular zigzags, were probably made by either carefully carving into the surface of the rock with a sharp object or by pecking. Simpler Groove petroglyphs, such as straight grooves running down the side of a boulder, could have been either by pecking, scooping, or by dragging a sharp object down the side of the rock. Although mostly nonrepresentational, one example, Rock F in site RN51, clearly depicts the shape of a bird.

Cups appear in sites throughout my survey area, but are more common in the Northern Cluster and the northeast side of the Central Area. On some cases, these are the only petroglyphs on a given boulder, as is the case of Rock 5 on Site X22 and Rock 2 of

Site X01. In other cases, they may be used in combination with other types of marks, as it is seen in Panel C of Site QMA01.

Not all circular pits look the same and they probably were not made in the same manner either. Northern Cluster circular pits tend to be larger and deeper than those in the Central Area. These Northern Cluster pits are often found in sites that have Grooves, and in the case of Rock 2 in Site X16 were probably done at the same time as the grooves that appear next to them. Northern Cluster pits measure about 2 to 3 cm in diameter and were probably made by carving into the surface of the stone with a small, sharp rock, twisting it around and grinding the rock surface until the circular shape of the pit was created. In the case of some of the pits that were carved on the NW side of Rock 1 in Site X20 (Fig. 6.43), the pits are much larger than in any other rock art site in this valley. These measure about 8 cm in diameter and required considerably more effort to carve, probably using a larger rock to carve into the rock surface and perhaps requiring more percussion than grinding. Pits found in Central Area sites are usually smaller, with an average diameter of 2 cm, and usually are arranged in rows or in rectangular or circular shapes.[39] Central Area pits were probably made using a small sharp stone to grind the surface of the rock in a circular motion. Pebbles may also have been used to smooth the shape of the pit.

In the majority of Groove petroglyphs, part or all the groove petroglyph goes down an inclined or vertical side of the boulder. For example, in X16's Rock 2 (Fig. 6.44), the grooves start in the upper portion but continue down a vertical side (indicated

[39] At Site QMA01 pits form lines and rectangular shapes, for example, and in Rock 2 of Site X01 pits are arranged in a circular shape around a central pit.

in the drawing by an arrow). At X20 (Fig. 6.43), grooves descend on the vertical side of the boulder from large pits. This, I believe, related to the grooves' function, which will be addressed in Chapter 8.

Grooves, and combinations of pits and grooves, are present in many areas of the world (Parkman 1994; Steinbring, Granzberg, and Lanteigne 1994) and in the Americas some sites with grooves are believed to be considerably earlier than the Nasca Valley petroglyphs (Grieder 1982: 41-42; Parkman 1994: 6). Grooves in the survey area, however, probably have later dates for the following reasons: Grooves and Features a in Panel F and the fish in Panel E of Site QMA01, which are clearly Nasca, may be related, since the making of both involves similar technical processes.

Proulx (1999: 61) also identified one of the Groove Style petroglyphs at RN51 (Rock F) as a Nasca Horrible Bird. Since this is the only representational Groove Style petroglyph, its resemblance to a figure with a known cultural attribution would help in securing a date for this type of petroglyphs. However, subsequent tracing of this figure revealed that, although the figure clearly represents a bird, it lacks direct iconographic correspondences with the Nasca Horrible Bird, so this comparison did not lead to any conclusive results regarding a Nasca date for these petroglyphs.

The location of groove sites, on the NE side of the valley links these to the remains on the Nasca Pampa. Importantly, the geoglyphs on the Nasca Pampa are associated to Early Intermediate Period and Late Intermediate Period remains. One could argue that a late date for Groove Style petroglyphs is possible due to the existence of groove petroglyphs that date to the Middle Horizon, Late Intermediate Period, and Late

Horizons in the Central Andes. In the Inca site of Qenqo, near the city of Cuzco, for example, there are grooves in the shape of zigzags that descend from a circular pit, a pattern similar to that found among the Northern Cluster grooves in the Nasca Valley. Grooves or "canals" have also been found in Ayacucho, at the site of Wari and in Lucanas, close to Late Intermediate Period and Inca remains (Clarkson 1990: 168-169). These would therefore be more Groove-style petroglyphs in the highlands directly above the department of Ica with late associations.

GROUP I: Interlocked Biomorphic Motifs (Unknown Date)

This particular group of petroglyphs are found primarily at La Caseta in the Santa Cruz valley (Fig. 6.45). Unlike Groups A through G, this is not a group that determined by iconographic comparisons. Instead, it is strictly a group of petroglyphs that is stylistically related to each other. These petroglyphs consist of anthropomorphic and zoomorphic forms that are simply drawn as outlines, and connected to each other (Núñez Jiménez: Figs. 1928 and 1929). At La Caseta, the anthropomorphs are simple stick figures without facial features. They are connected through their legs or arms to other forms around them, often other biomorphs. Orefici (1993: Fig 18) includes a drawing of petroglyphs at Las Trancas Valley which also shows connected anthropomorphic shapes.

Possible comparisons to this particular style can be found at the rock art site of Huancor in the San Juan Valley. At Huancor there are several examples of petroglyphs that can be identified as belonging to this style. Considering the possible connections existing between Huancor, Group A, and Group E petroglyphs, it is interesting to see a

further connection between the San Juan valley petroglyphs and those of the Grande River System.

GROUP J: Pictographs (Unknown Date)

This particular group is unique as it is the only group based exclusively on technique. Pictographs, or painted examples of rock art, are rare in the survey area and in the rest of the Grande River System.[40] Within the survey area, pictographs were found exclusively at Site X02 (Fig. 6.46), although traces of paint are also found at site QMA01 (Proulx's RN49). At Site X02, the majority of the pictographs consisted of representations of quadrupeds. In the case of Rock 2 these are possibly camelids, all done in yellow, whereas in Rock 3 they may also represent deer, painted in dark red and yellow. The quadrupeds of Rock 3 have spots drawn on their bodies made by carving out the surface of the rock in circular shapes. Additionally, Rock 5 at this site also has red and yellow zigzags. The surface of Rock 4 also contains traces of paint.

At Site QMA01, red pigment covers large areas of Panels B, C, and F. Although at first there was doubt as to whether this was paint or a naturally occurring phenomenon (especially considering some boulders in the Grande River System have a reddish surface due to the oxidation or iron), red drip marks on Panel C were a clear indication that pigment was used on the surface of these panels. Additionally, a small stone with red

[40] Orefici (1993) documented a site called Huayhua near the border of the department of Ayacucho that has pictographs. I did not visit this site during my time in the Nasca area.

pigment was also found at this site. Furthermore, a series of vertical, black stains on Panels F and G could be natural, although further testing is necessary.[41]

GROUP K: Semi-Circular Headdresses

Anthropomorphs with semi-circular headdress are shown on Features 1V, 2G, and 2F of Site X02's Rock 1 and Site X03's Rock 7 (Fig. 6.47). Although one would expect the first three examples to be quite similar to each other since they are all on the same engraved boulder, they actually display some variety in their depictions. A semi-circular headdress usually consists of one or two curved lines above the head of the anthropomorph, with smaller radiating lines connecting the head to these curved lines. The only exception to this is Feature 2F in Site X02's Rock 1, which does not have the connecting, radiating lines, making the headdress resemble a rainbow floating over the figure's head.

Figures with this type of headdress are found only in two sites within the survey area, but similar headdresses are also found throughout the petroglyphs of Chichictara, in the Palpa Valley (Fig. 6.48). Although the Chichictara examples include several headdresses that consist of a large arch and connecting radiating lines, there are also at least three examples of the "rainbow" headdress shown in Feature 2F of Site X02's Rock 1. There is also an additional characteristic of the Chichictara semi-circular headdress. In some cases there are three projecting extensions added to the headdress: one vertically on top of the head, and two horizontal extensions at each side. This could be related to

[41] Both Shane Valentine, of the University of Texas, and Rubén García, of the Instituto Nacional de Cultura, believed these to be natural.

the vertical and horizontal headdress addressed earlier in this chapter. Such extensions are not found anywhere in the Nasca Valley.

Regarding the Nasca Valley semi-circular headdress with radiating lines or as a "rainbow" shape, it is very difficult to secure a date for these through any type of iconographic comparison with datable art. The only indication we have of the possible sequence in which motifs were made is a superimposition of petroglyphs found in Rock 1 of site X02, where Feature F2 (depicting an anthropomorph with a "rainbow" over its head) has been pecked on top of a preexisting figure of a feline. From this, we can conclude that at least that figure with a "rainbow" above its head postdates the representations of the felines, although by how much is uncertain.

Other Iconographic Motifs in the Nasca Valley

Examples of anthropomorphs, of which there are many in the survey area, cannot be easily grouped into categories based exclusively on style or iconography. There seems to be a large number of anthropomorphs that are shown holding staffs or bars, or in some cases bundles or heads. These figures are depicted so differently from each other so that it is impossible to group them in one category based on iconography, style, or technique. At the very least, different hands were involved in their manufacture, and they were made in very different styles. They do not appear to be as common in other valleys, although some seated figures in the Palpa Valley are shown with staffs and there are also staff holders among the anthropomorphic geoglyphs.

There are also at least four anthropomorphs in the survey area with a clearly indicated navel marking. Again, these examples are so different from each other that it is

difficult to place them as one group solely based on this characteristic. The emphasis on the navel is a trait that is also found in anthropomorphic petroglyphs elsewhere in the Grande River System.

There are also two examples of anthropomorphs with a very distinct type of head that has a single, small, central, circular mark as its only facial feature (such as the figure in Rock 9 of Site X05). Although I have not encountered other anthropomorphs like these examples elsewhere in the Grande River System, the only possible exceptions being at La Caseta, it is important to point out their existence in case more are found by future fieldwork.

Another group of equally problematic anthropomorphic designs represent isolated heads. There is much variety among these. Some clearly include the outline of the head with internal facial features. These may represent trophy heads, which were common in the iconography and are well documented in the area's archaeological record.

Among other Nasca Valley petroglyphs that are difficult to place within a group are geometric motifs such as rayed shapes and grids. Of these, rayed shapes display the most variety, from simple star-like arrangements of lines (Motif D at Site X05's Rock 8 and Motif B at Site X01's Rock 4) to circular forms with rayed projections (Feature E in QMA01's Panel G, Feature C in Site X09, Feature 1M in Site X02's Rock 1, and Features J and B in Site X02's Rock 4). Rayed shapes are not unique to this area, and many examples are found at the site of Chichictara in the Palpa Valley. Grids are found in three sites, all within the Quebrada Majuelos area. Site QMB03's Drawing 1 is a small grid done on the "floor" of a natural cave-like formation. At sites QMC14 and QMA01,

the grids are larger, although the latter example includes two circular pits done within the grid. Although these suggest eyes, anthropomorphizing the grid, it is not clear as to whether this was the intent of the maker of these petroglyphs. An additional motif that appears to be unique and equally difficult to place in a group or compare to datable material is the row of ovals found specifically at RN43.

Conclusions

In this chapter, I provided an iconographic and stylistic catalog of Nasca Valley and Grande River System rock art. This was done in part by determining a typology for the rock art motifs. These were in turn compared to datable material in order to establish temporal parameters for the rock art of the Grande River System. Such a classification of the artwork would have been incomplete if only the Nasca Valley survey area was considered and the available evidence from the adjacent valleys had been excluded.

The analysis revealed that a lot of the area's rock art is comparable to Early Horizon material. Groups A through E in fact can be dated to the Early Horizon, and mostly to the later phases of this epoch. The motifs within these groups could therefore also be contemporaneous to each other, especially in Groups B through E. Through the association to the Oculate Being, Groups B, C and D are iconographically linked.

Petroglyphs from Groups F and G are likely to fall under the Early Intermediate Period. It is difficult to speak of distinct phases of rock art since there appears to be a continuity between the rock art of the late Early Horizon and that of the early Early Intermediate Period. The amount of rock art made during the Early Intermediate Period however seems to decrease considerably. At the same time, petroglyphs get considerably

larger during this time, and there is a tendency for the petroglyphs to resemble the Nasca ceramic style more closely.

It is difficult to estimate how much of the existing rock art pre-dates the Early Horizon. There is, however, very little Pre-Early Horizon material in this river system. Silverman (1994) argued that in the Ingenio Valley, evidence points to an increase of population over time, with a relatively small population in the pre-Early Horizon and Early Horizon phases, and much larger populations during the Late Intermediate Period. The evidence presented in this chapter implies a very active late Early Horizon, however, with many rock art sites simultaneously made throughout the river system, especially in the Nasca and Palpa Valleys.

This chronology both refines and complicates that proposed by Reindel, Isla, and Koschmieder (1999). These scholars argued that geoglyphs developed out of the area's petroglyphs. The imagery of the petroglyphs became larger and was placed on hillsides, according to the authors, and then eventually became more stylized and geometric as it moved away from the hillsides and onto the *pampas*. In general, my data supports the progression proposed by these scholars. However, a closer relationship between the geoglyphs and petroglyph iconography was established. Most importantly, petroglyph making activity was argued to continue beyond the dates proposed by these authors. This indicates that this art form was not completely abandoned after the linear geoglyphs of the Nasca Pampa were made. Furthermore, Figure 6.1 also demonstrates that some of the same motifs were depicted in both geoglyphs and petroglyphs from the later portion of the Early Horizon through the earlier portion of the Early Intermediate Period.

There was activity at these rock art sites up to the Late Intermediate Period, although it is not possible to definitely prove petroglyph making activity during this period or later. It is also difficult to assess how many petroglyphs and geoglyphs were made after the Middle Horizon or the Late Intermediate Period. Surface sherds belonging to later periods at some rock art sites show that the sites were still active centuries after the petroglyphs were made. On two Nasca Valley sites with feline representations (Group C in this sequence), Site X02 and QMC14, potsherds around the rock art dated to the Late Intermediate Period, meaning that the site remained somewhat active until c. 1000-1400 AD, long after the petroglyphs were made. Additionally, it is also possible that the geoglyphs found at rock art Sites X01 and QMA01 post-date the petroglyphs found at those sites, since the geoglyphs seem to adapt to the location of the petroglyphs instead of the other way around.

Evidence for later periods, however, is difficult to identify based on a stylistic and iconographic comparisons of the petroglyphs to datable material, since Late Intermediate and Late Horizon pottery and textiles tend to have primarily non-representational, geometric designs in their art. There are ceramic surface remains at several sites in my survey area that indicate that there was some type of activity at petroglyph sites through the Late Intermediate Period at the very least. Furthermore, as indicated above, archaeological remains in the valleys of the Grande River System indicate a lot of activity during this period. The lack of Late Horizon (Inca) potsherds in the survey area does not ultimately prove that petroglyph making had ceased by this time, however. Proulx (1999) reported relatively few Inca remains in this portion of the valley and proposed that the

local inhabitants continued making Late Intermediate Period pottery even during the times of Inca control.

There are petroglyphs that vaguely resemble Wari ceramic iconography, such as Rock 18 at Site X21, although these are fewer and are in poor condition. Their heads are rectangular and their eyes are large and round. Multiple rays radiate from their heads. Another example is at Site X19 Rock 1. It also has a rayed head and round eyes and a line that descends from each eye. The surface of both the X21 Site and X19 Site petroglyphs is badly damaged and the petroglyphs are barely visible. It is not clear, however, whether these petroglyphs were destroyed on purpose. Due to the poor condition of these petroglyphs and the fact that very little of the figures remains visible, I have reservations about attributing these petroglyphs to the Wari.

Finally, the geoglyphs in the area present a problem as well. More work needs to be done with the geoglyphs that are not made with continuous, unbroken lines, as some of these geoglyphs may have later dates. Geoglyphs made with additive techniques such as piling of stones are, as seen in the work of Reindel, Isla, and Koschmieder, usually assumed to constitute a single category and to have early dates. Other types of additive geoglyphs, such as the ones made by aligning stones, are rarely mentioned or reproduced in publications that focus on this topic, and yet several examples of these were found during my survey.[42] Similarly made geoglyphs in Arequipa have been given dates within

[42] There were two geometric geoglyphs done in this manner near the Northern Cluster and three more inside Quebrada Majuelos, one of them in the shape of an *antara*, an Andean wind instrument.

the Middle and Late Horizons (Linares Málaga 1970: 387-388). The possibility that some of these geoglyphs post-date the Nasca culture should be kept open.

Additionally, although Reindel, Isla, and Koschmieder's geoglyphs were documented in maps and their contextual information was included in their publications, this is not the case for many other representational geoglyphs that have been reproduced in previous publications. The publication of this crucial information is necessary to shed further light on the relationship between these geoglyphs and the petroglyphs of the Grande River System.

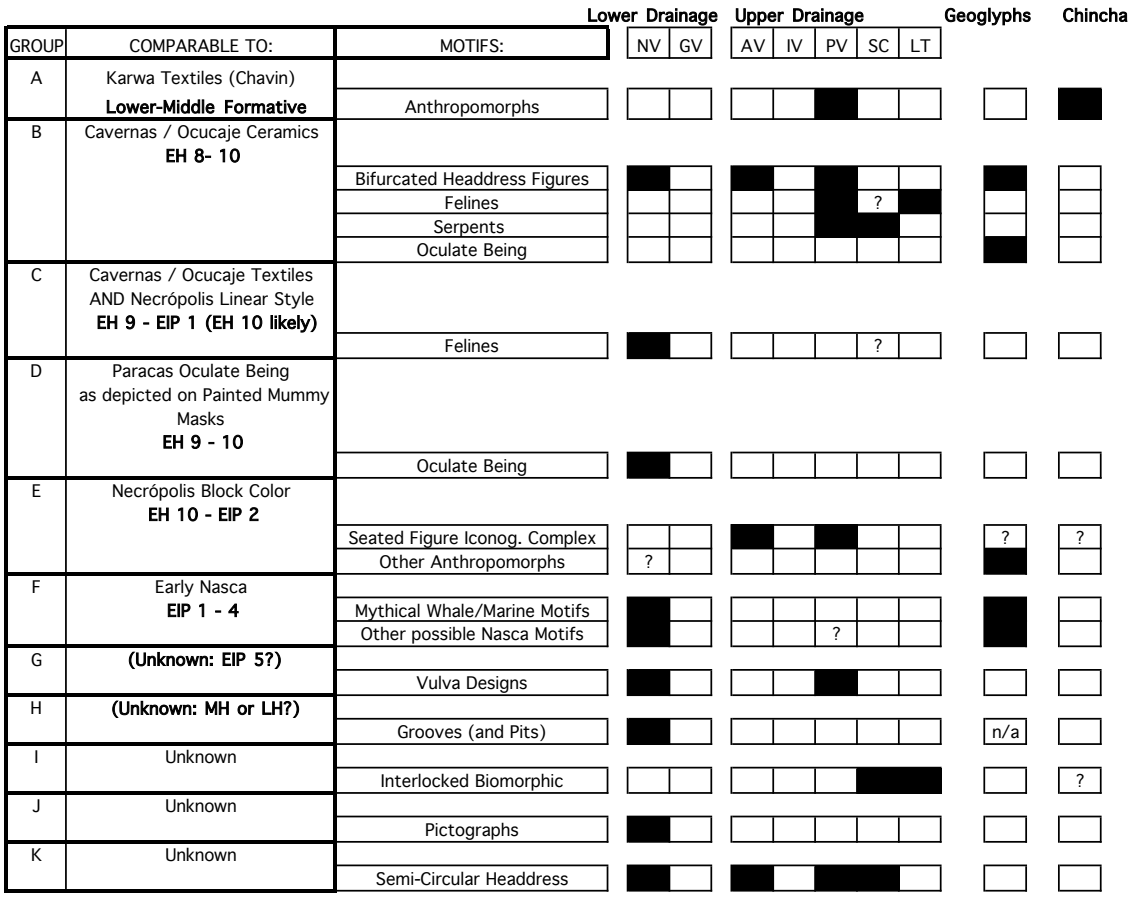


Figure 6.1: Iconographic Types in the Grande River System Rock Art . [Valley name abbreviations: NV= Nasca Valley, GV=Grande Valley, AV=Aja Valley, IV= Ingenio Valley, PV=Palpa Valley, SC= Santa Cruz Valley, and LT=Las Trancas Valley]

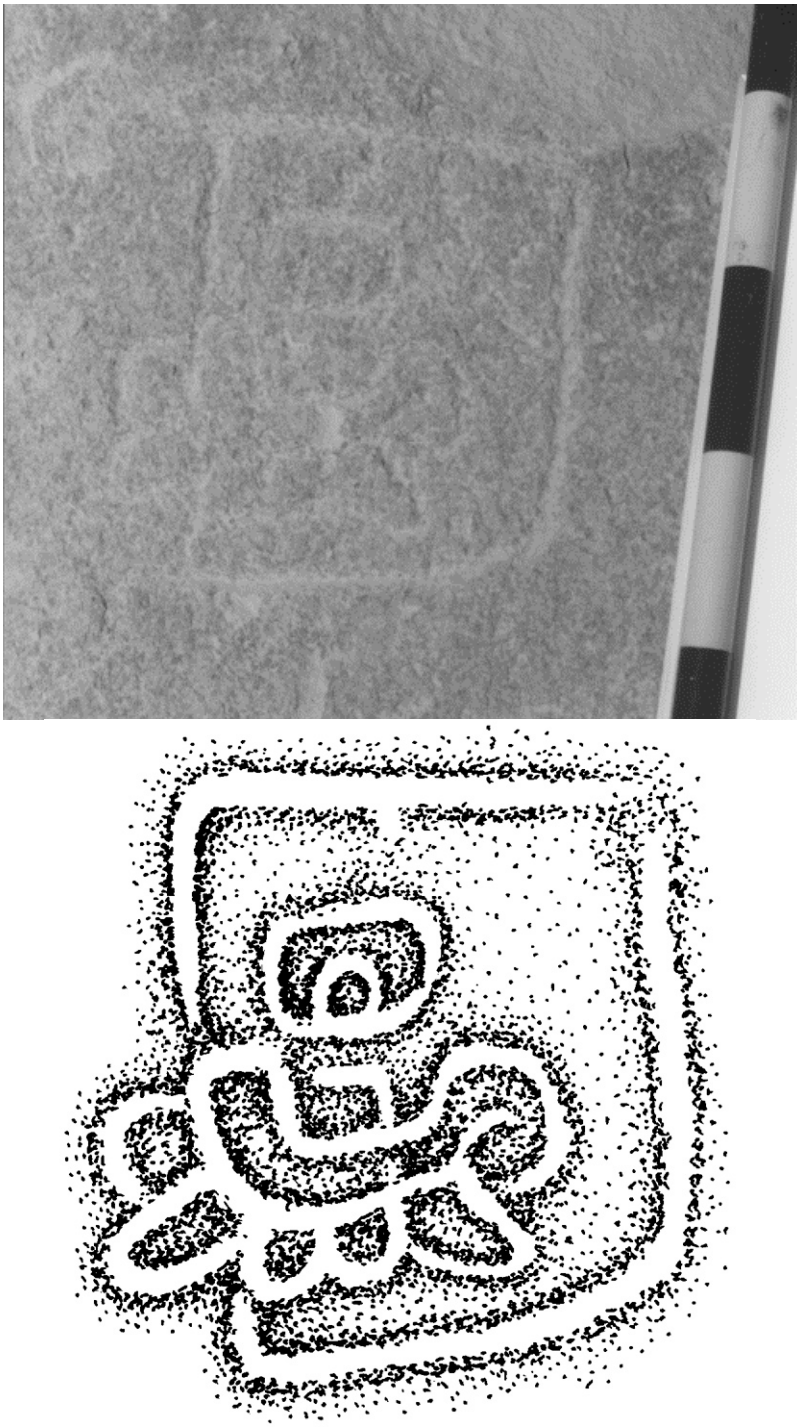


Figure 6.2: Chichictara Sector II, Rock 6 (photo and drawing: Ana Nieves)

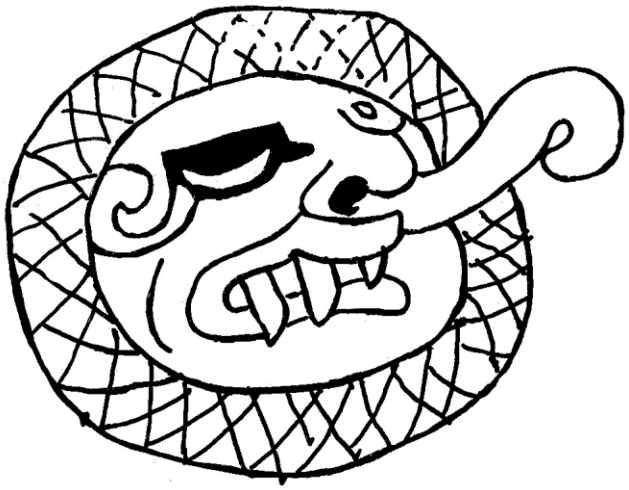


Figure 6.3: Initial Period: Garagay relief (After Burger 1995: Fig. 43)

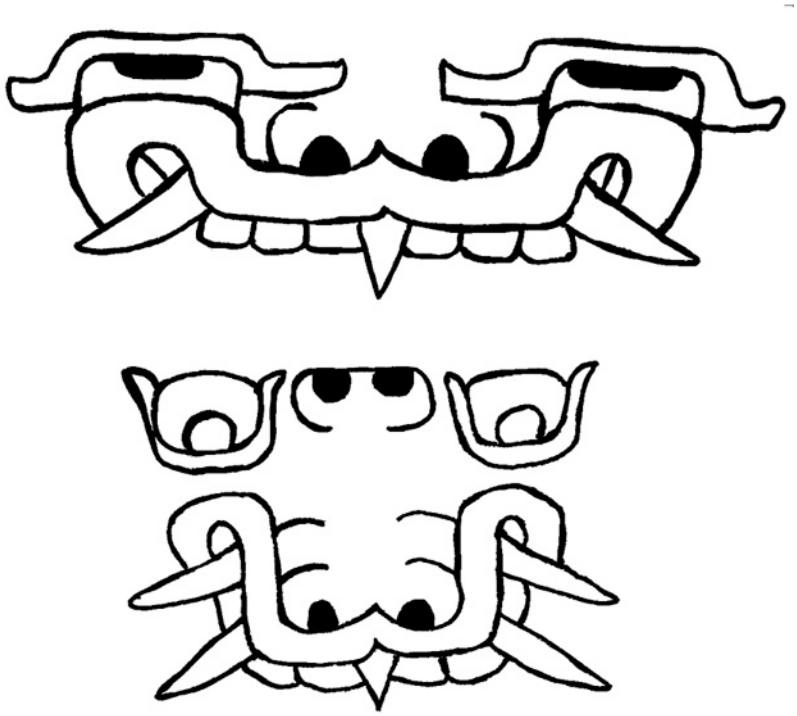


Figure 6.4: Early Horizon: Chavin de Huantar: Detail from Black and White Portal and Raimondi Stone (After Burger 1005: Fig. 176 and Fig. 179)

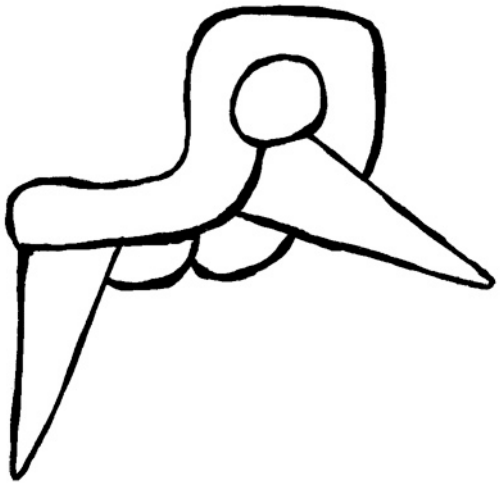


Figure 6.5: Detail from Amano Museum textile (Reg. #3220; drawing: Ana Nieves; after Cordy-Collins 1995: Fig. 3)

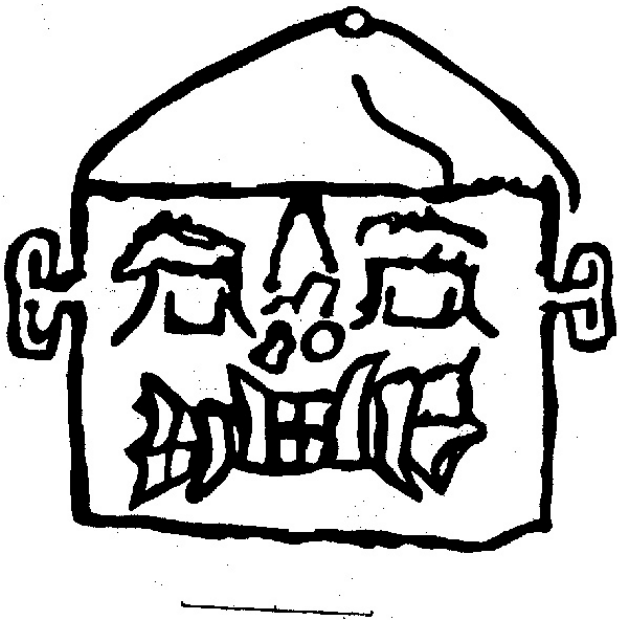


Figure 6.6: Site of Huancor (Chincha), detail (Núñez Jiménez 1986: Fig 1771)

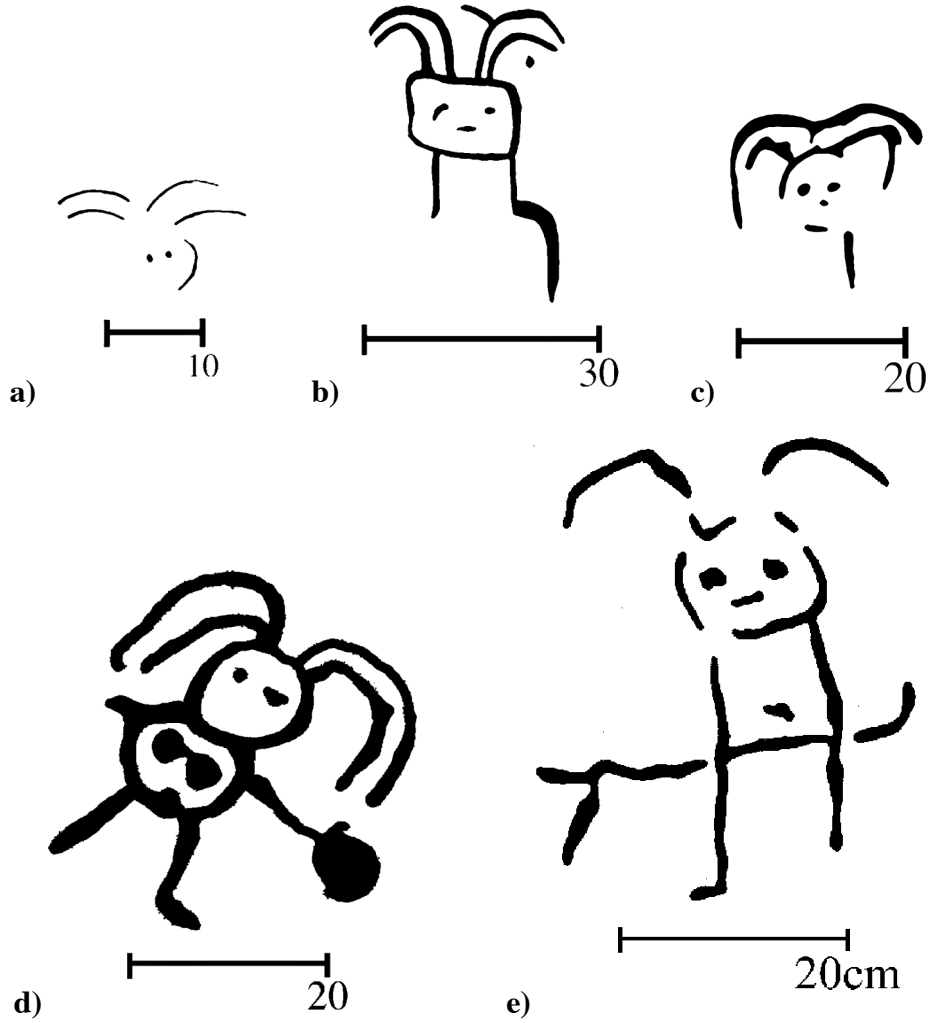


Figure 6.7: GROUP B Figures with Bifurcated Headdress in Nasca Valley: a) Site X02, Rock 4, Feature D; b) Site X02, Rock 4, Feature G; c) Site X02, Rock 4, Feature M; d) Site X03, Rock 1, Feature A; e) Site X14, Rock 1, Feature B (drawings: Ana Nieves)

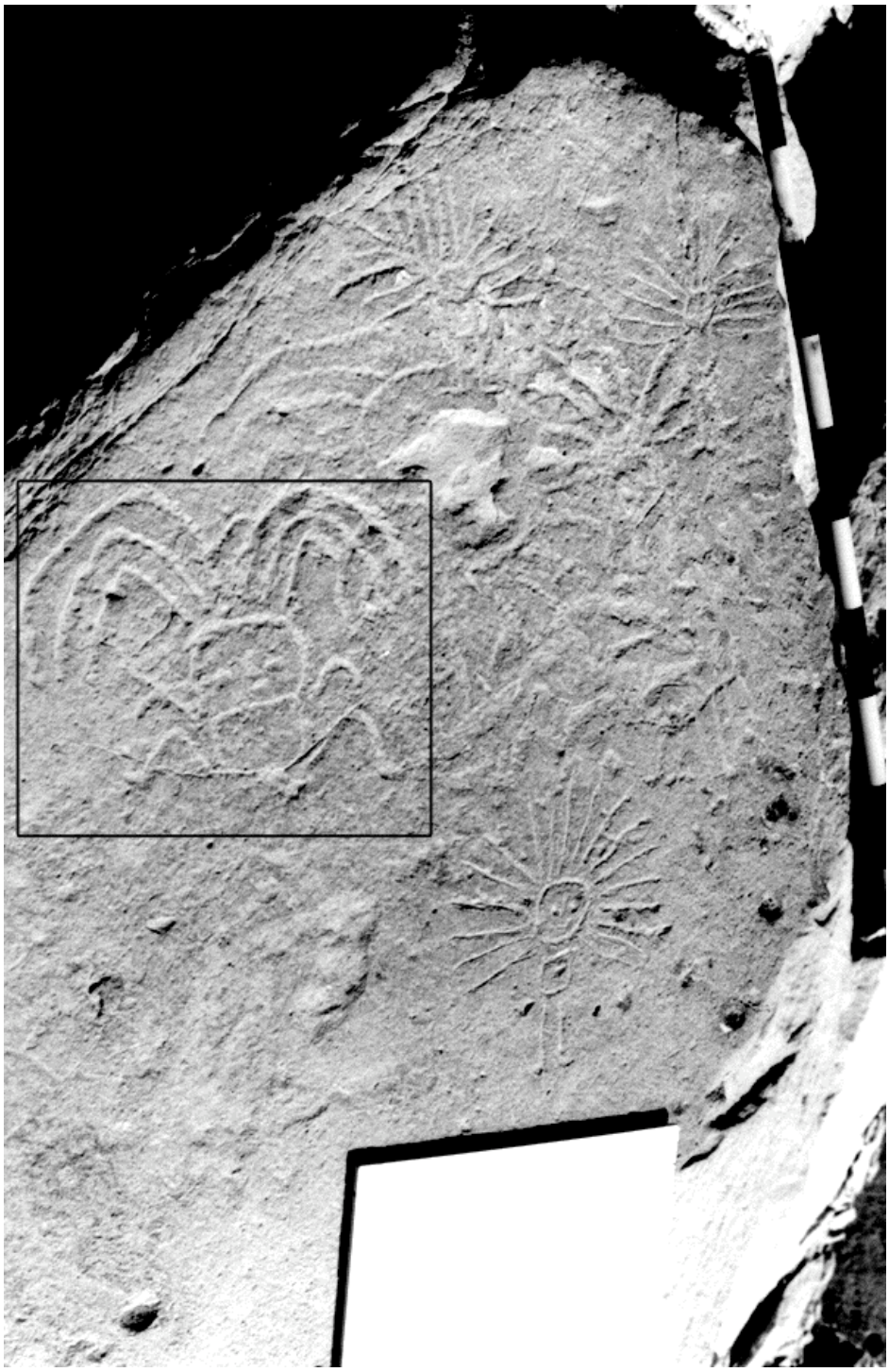


Figure 6.8: Chichictara, Sector II, Rock 41 (photo: Ana Nieves)

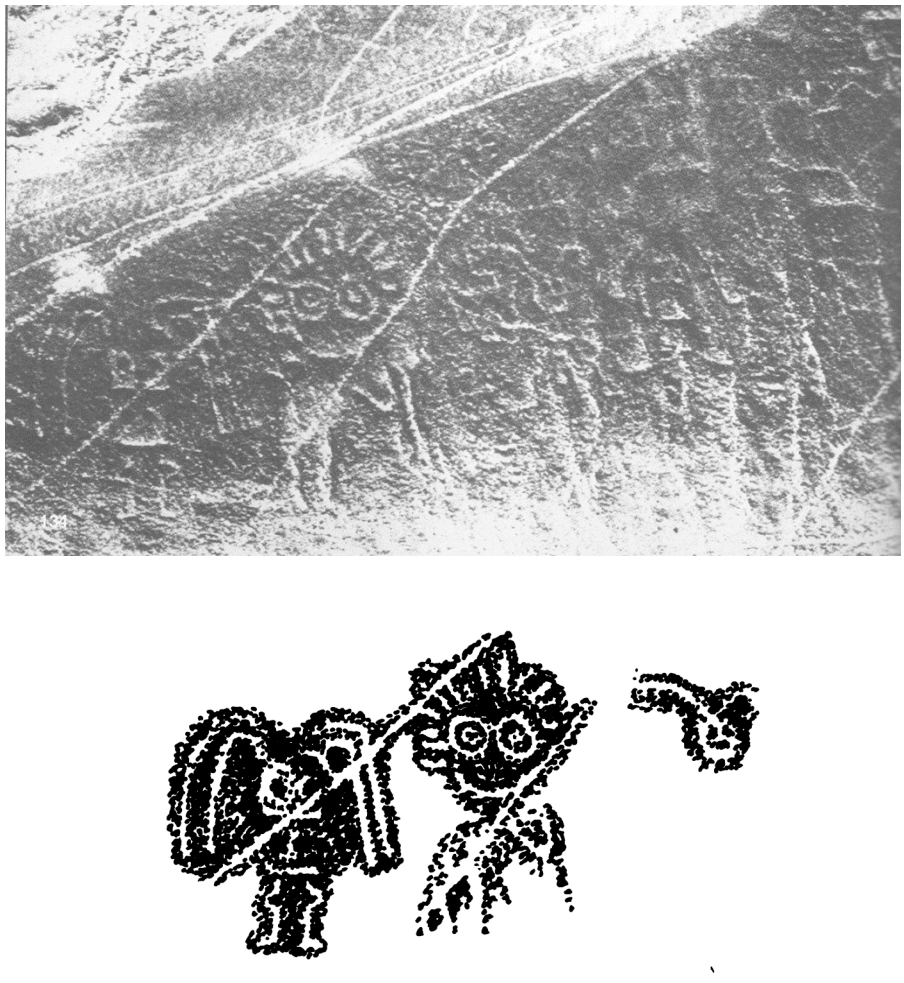
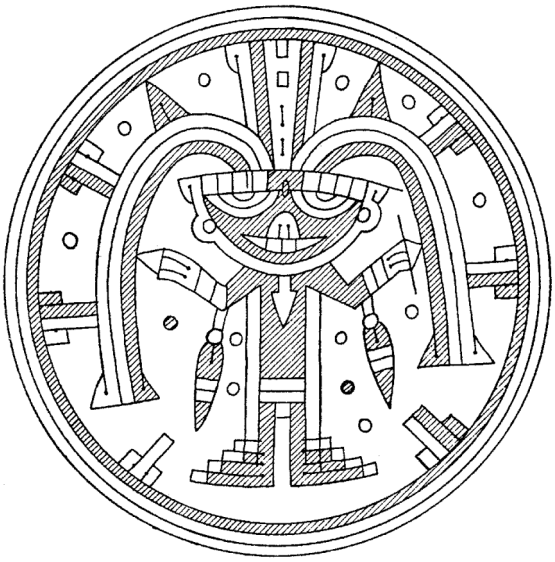
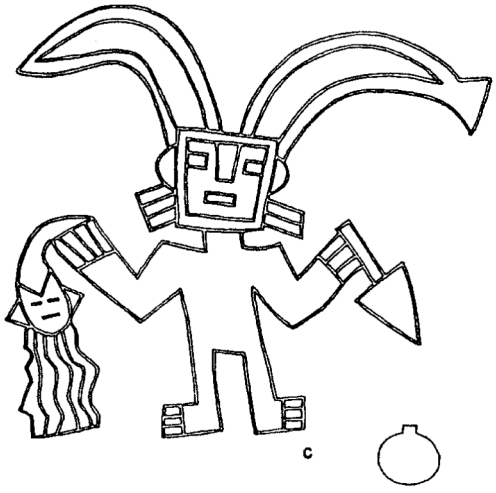


Figure 6.9: Geoglyph with Figure wearing Bifurcated headdress (After Kern and Reiche 1974: Fig. 134)



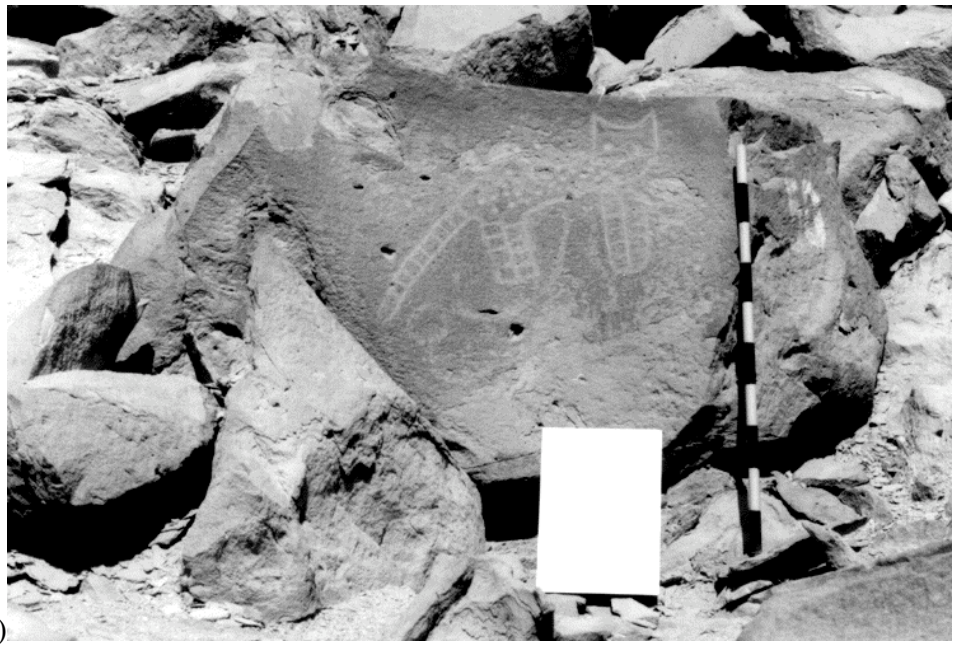
a)



b)

Figure 6.10: Paracas Figures with Bifurcated Headdress (Menzel, Rowe, and Dawson 1974: Fig. 44 and 52)

a)



b)

Figure 6.11: GROUP B Felines: a) Chichictara Sector II, Rock 50 (photo: Ana Nieves); b) Chichictara Sector IV, Rock 2 (Matos Avalos 1986: Ficha 119)

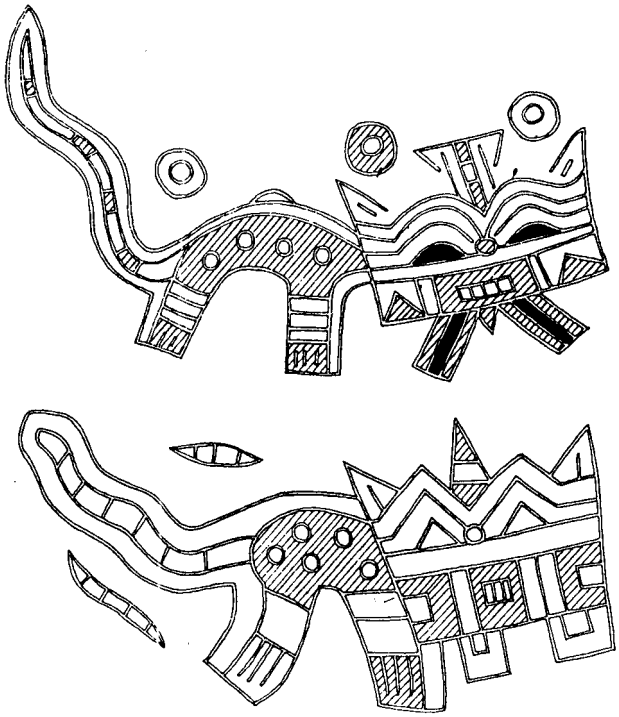


Figure 6.12: Ocucaje Felines (Menzel, Rowe and Dawson 1964: Fig.41)

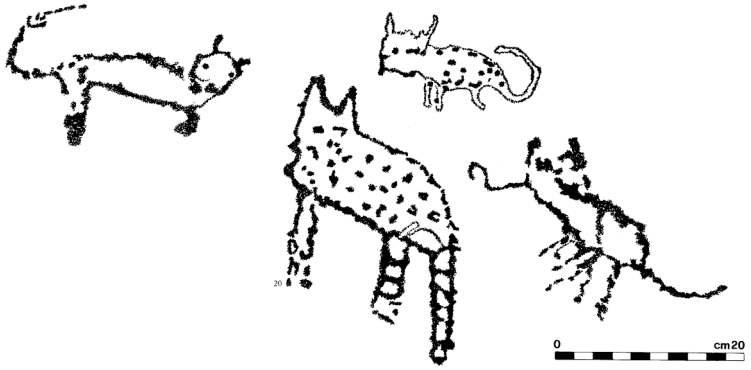


Figure 6.13: Felines from Las Trancas (Orefici 1993: Fig. 20)

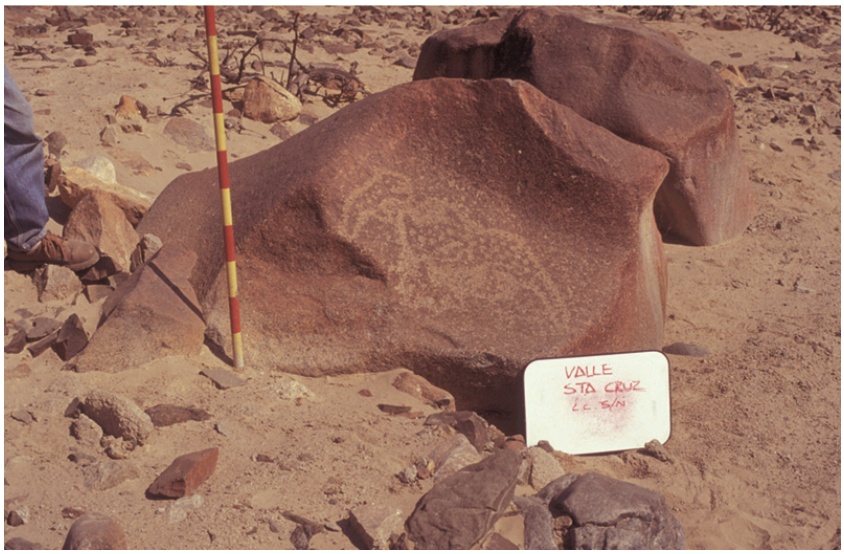


Figure 6.14: Feline from La Caseta, Santa Cruz Valley (photo: Ana Nieves)

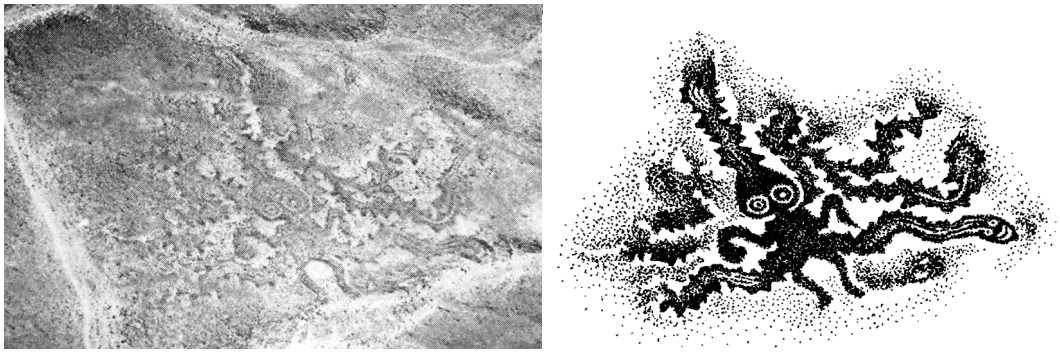


Figure 6.15: Oculate Being geoglyph (after Reinhard 1988a: Fig. 40)

Figure 6.16: Ocucaje Oculate Being (Menzel, Rowe and Dawson 1964: Fig. 58)

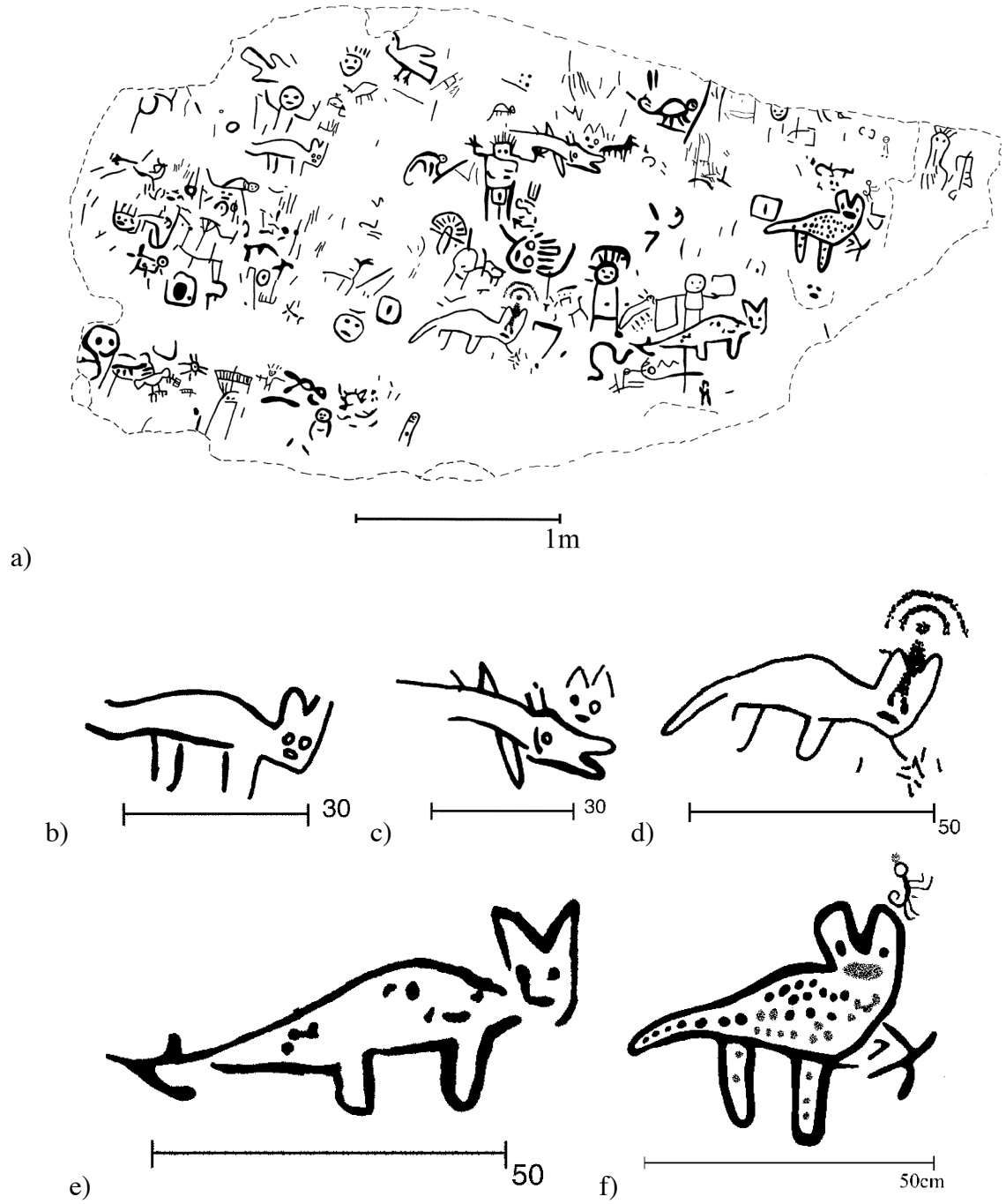
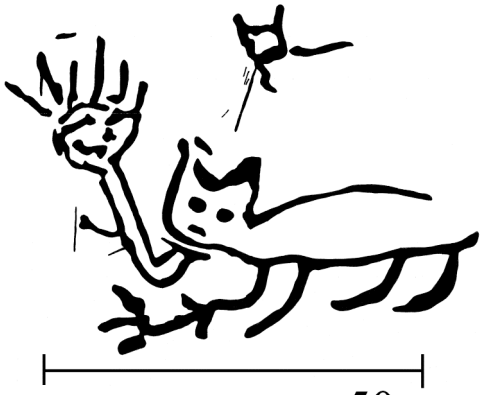
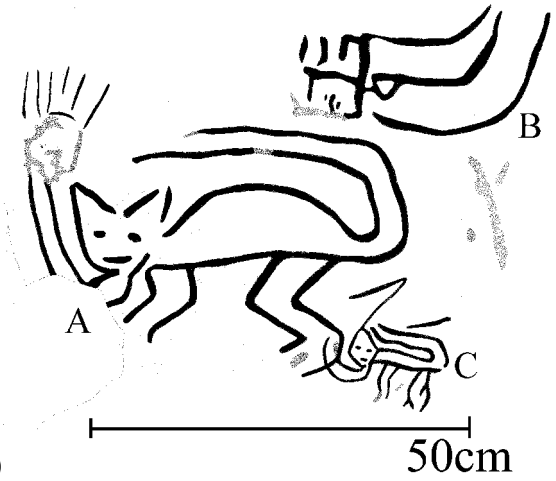


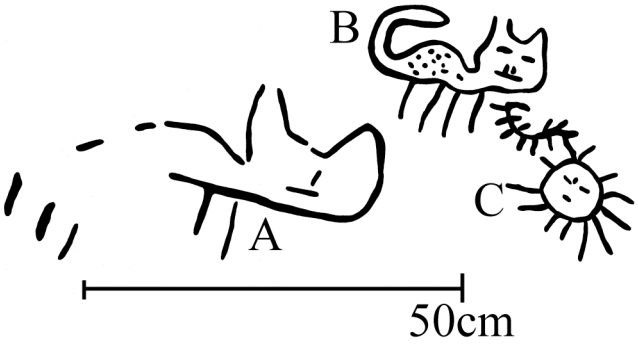
Figure 6.17: GROUP C Felines: Site X02, Rock 1: a) Drawing of decorated side; b) Detail of Feature 1F; c) Detail of Feature 1Z; c) Detail of Feature 2E [feline]/2f [anthropomorph]; d) Detail of Feature 2L; f) Detail of Feature 2R[feline]/2Q[monkey] (drawings: Ana Nieves)



a)



b)



c)

Figure 6.18: GROUP C Felines: a) Site QMC14 Rock B; b) Site QMC14 Rock C; c) X09 Rock 1 (drawings: Ana Nieves)

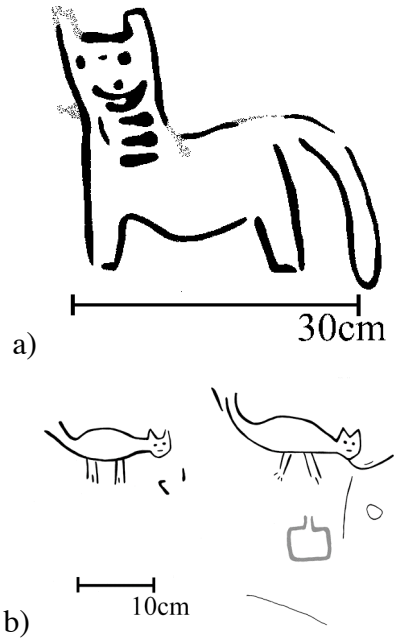


Figure 6.19: GROUP C Felines: a) Site QMB03 Feaure 4; b) Site QMA01, Panel B, Features C[feline], D[feline], and F[square] (drawings: Ana Nieves)

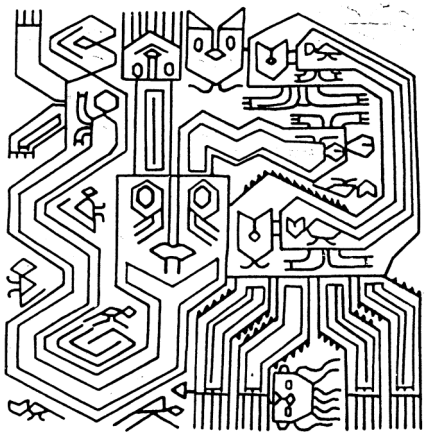


Figure 6.20: Paracas Linear Style Feline (Bird 1954: Fig. 91-97)

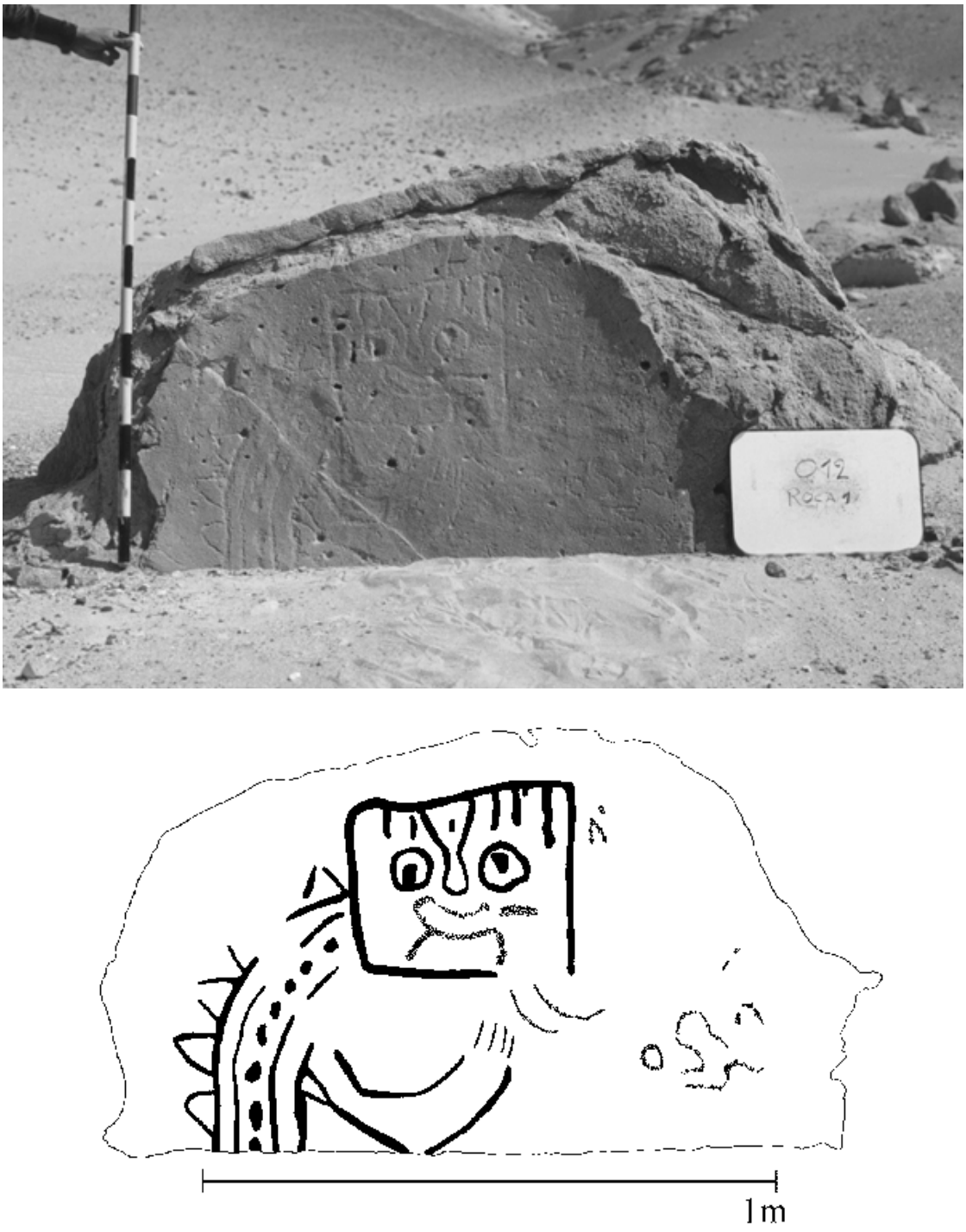


Figure 6.21: GROUP D Oculate Being: Site X12 (photo and drawing: Ana Nieves)

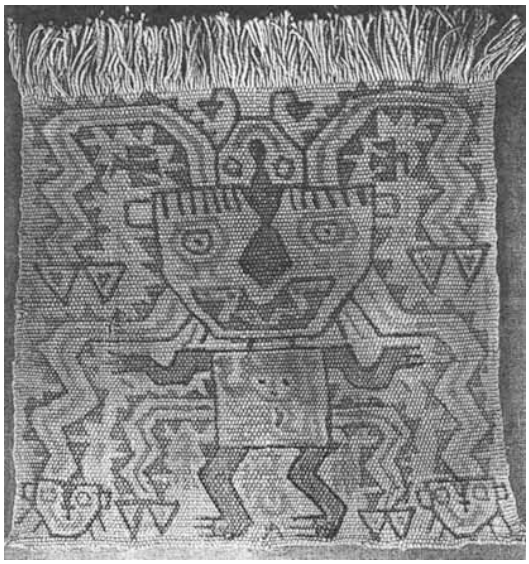


Figure 6.22: Ocucaje Mummy Mask showing Oculate Being (Bird 1954: Pl. LXIX)

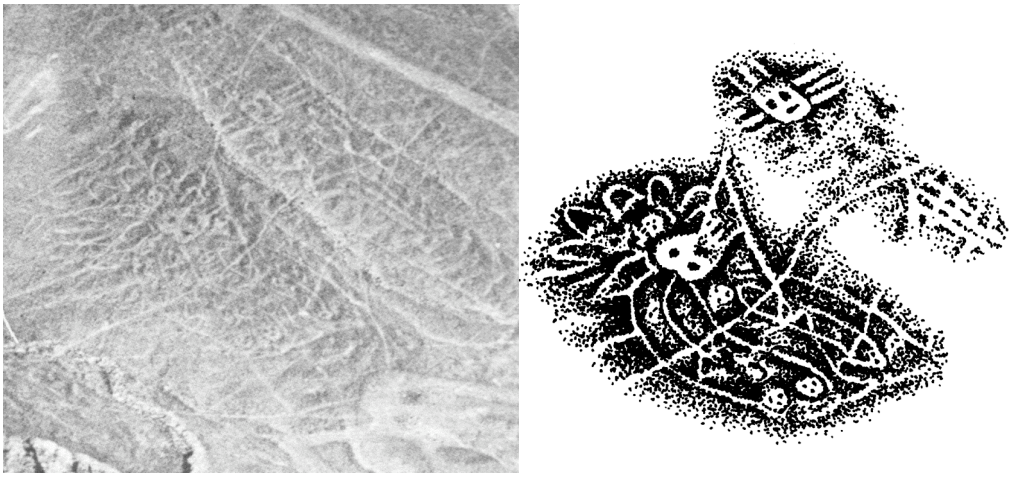


Figure 6.23: GROUP E Geoglyphs (After Kern and Reiche 1974: Fig. 130)

Figure 6.24: Example of Paracas Necrópolis figures (Tello 1959: Lam. XXXIX)

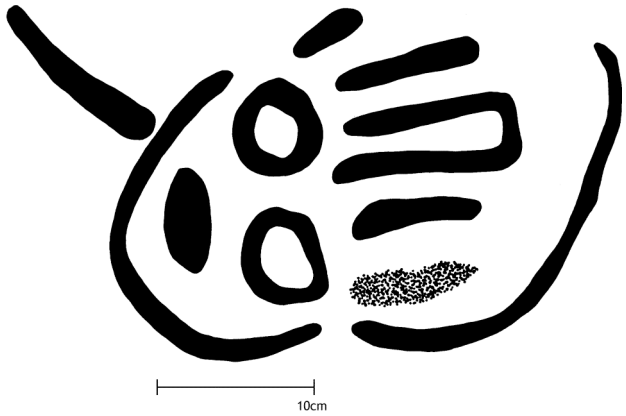


Figure 6.25: GROUP E head: Site X02, Rock 1, Feature 2D

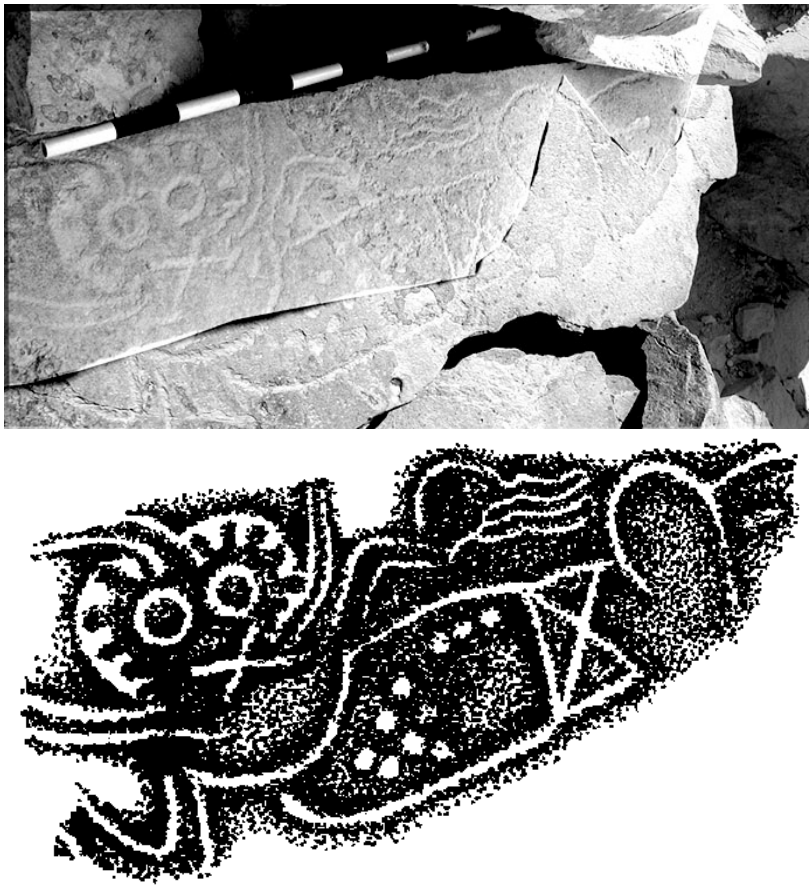


Figure 6.26: GROUP E: Seated Figure Iconographic Complex: Chichictara, Sector II, Rock 43 (photo and drawing: Ana Nieves)

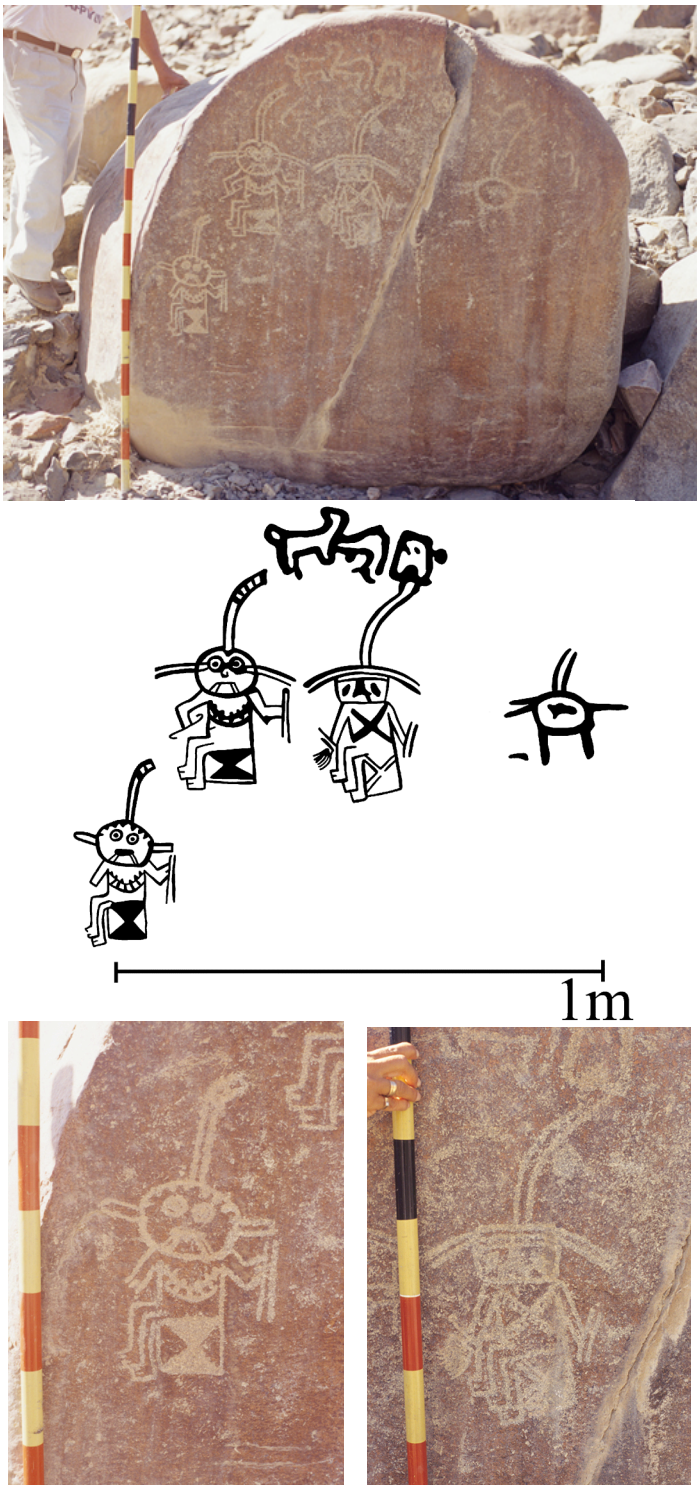


Figure 6.27: GROUP E: Seated Figure Iconographic Complex: Site of La Viuda, Palpa Valley (drawing and photos: Ana Nieves)

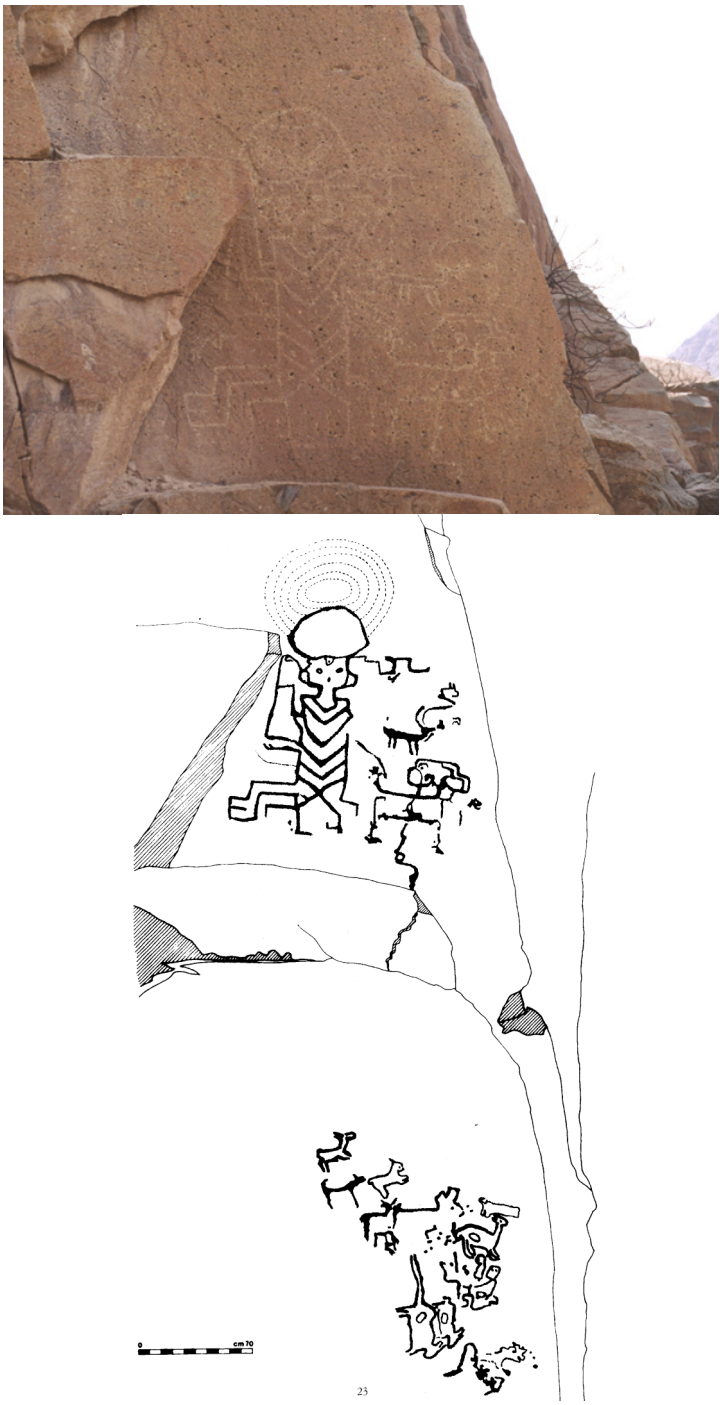


Figure 6.28: GROUP E: Seated Figure Iconographic Complex: San Marcos, Aja Valley (photo: Ana Nieves: drawing: Orefici 1993: Fig. 84)

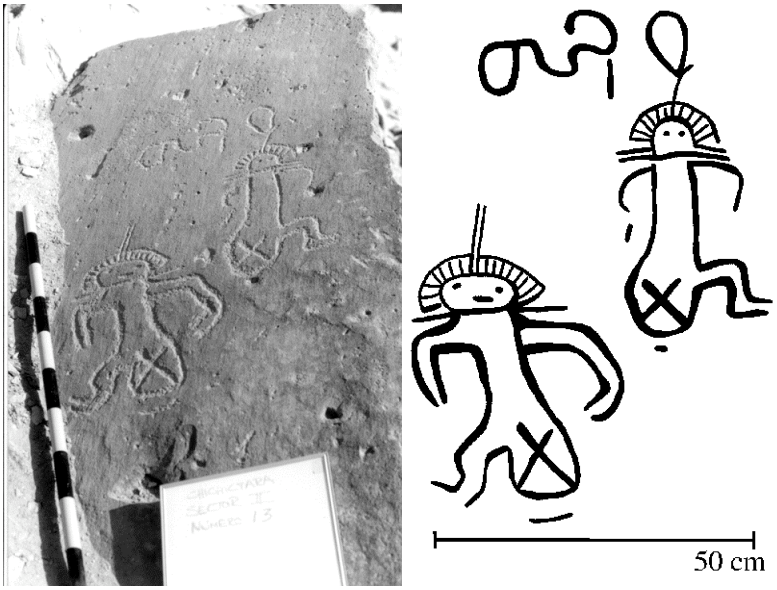


Figure 6.29: GROUP E: Seated Figure Iconographic Complex: Chichictara, Sector II, Rock 13.

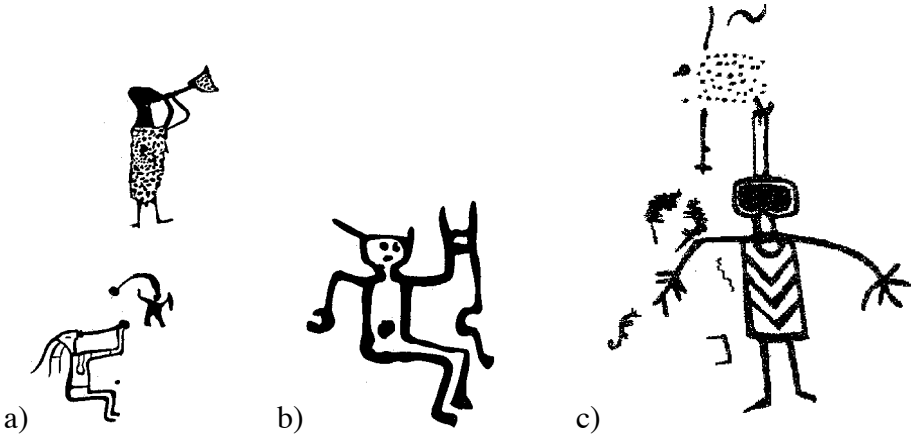


Figure 6.30: Huancor (Chincha): a) Seated figure (Núñez Jiménez 1986: Fig. 1694); b) Seated figure (Núñez Jiménez 1986: Fig. 1699); c) Figure with chevron pattern (Núñez Jiménez 1986: Fig. 1767)

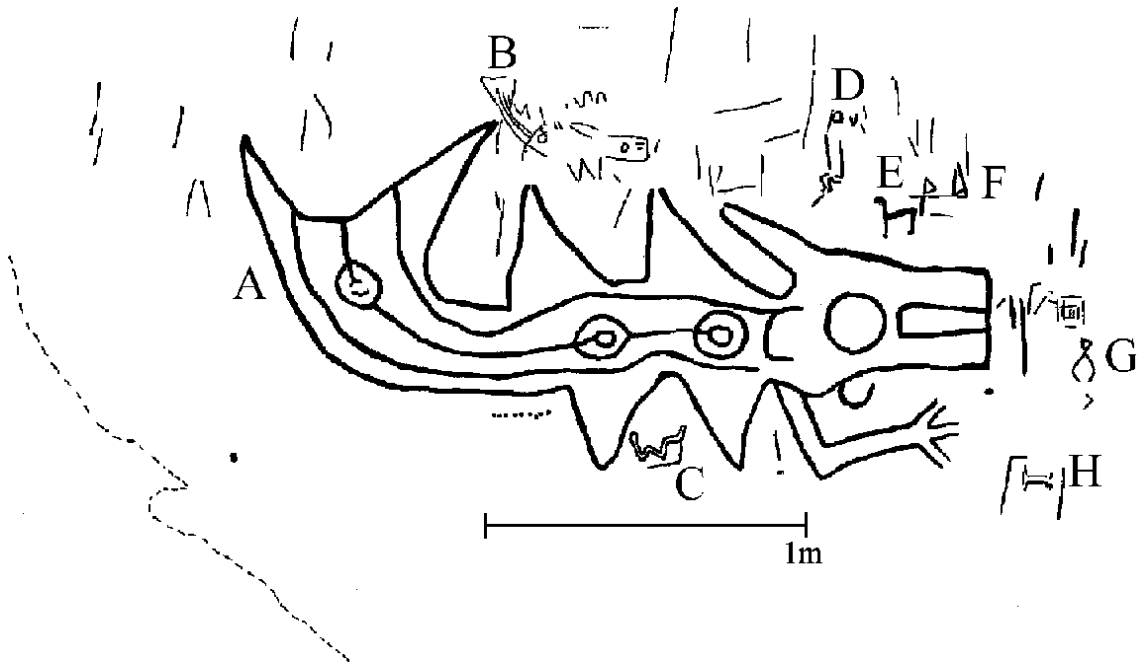


Figure 6.31: GROUP F: Nasca Mythical Killer Whale or Aquatic Composite Being: Site QMA01, Panel F (drawing: Ana Nieves)

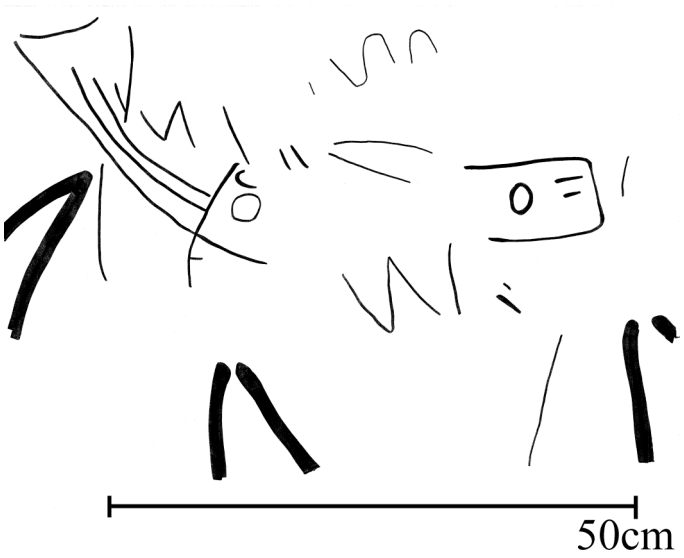


Figure 6.32: GROUP F: Nasca Mythical Killer Whale or Aquatic Composite Being: Site QMA01, Panel F, Feature Q (drawing: Ana Nieves)

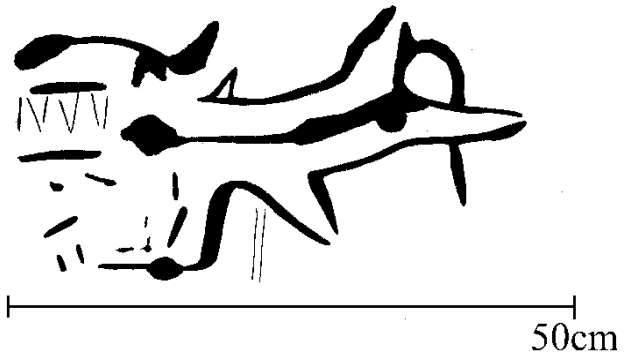


Figure 6.33: GROUP F: Nasca Mythical Killer Whale or Aquatic Composite Being: Site X02, Rock 4, Feature Q (drawing: Ana Nieves)

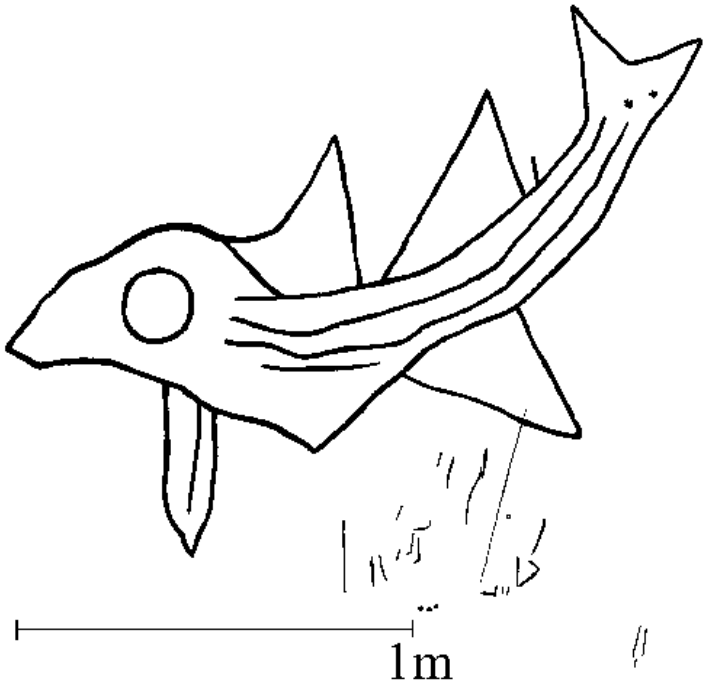


Figure 6.34: GROUP F: Marine animal: Site QMA01, Panel E (drawing: Ana Nieves)

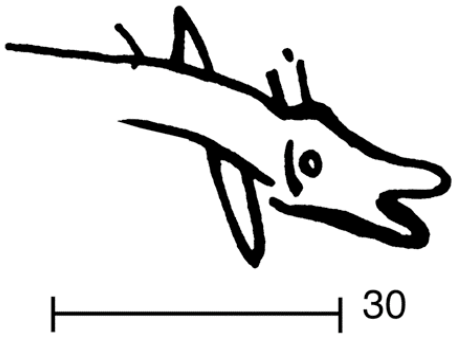


Figure 6.35: GROUP F: Marine animal: Site X02, Rock 1, Feature 1Y (drawing: Ana Nieves)

Figure 6.36: Nasca Mythical Killer Whale or Aquatic Composite Being in ceramics (Proulx 2006: Pl. 4)

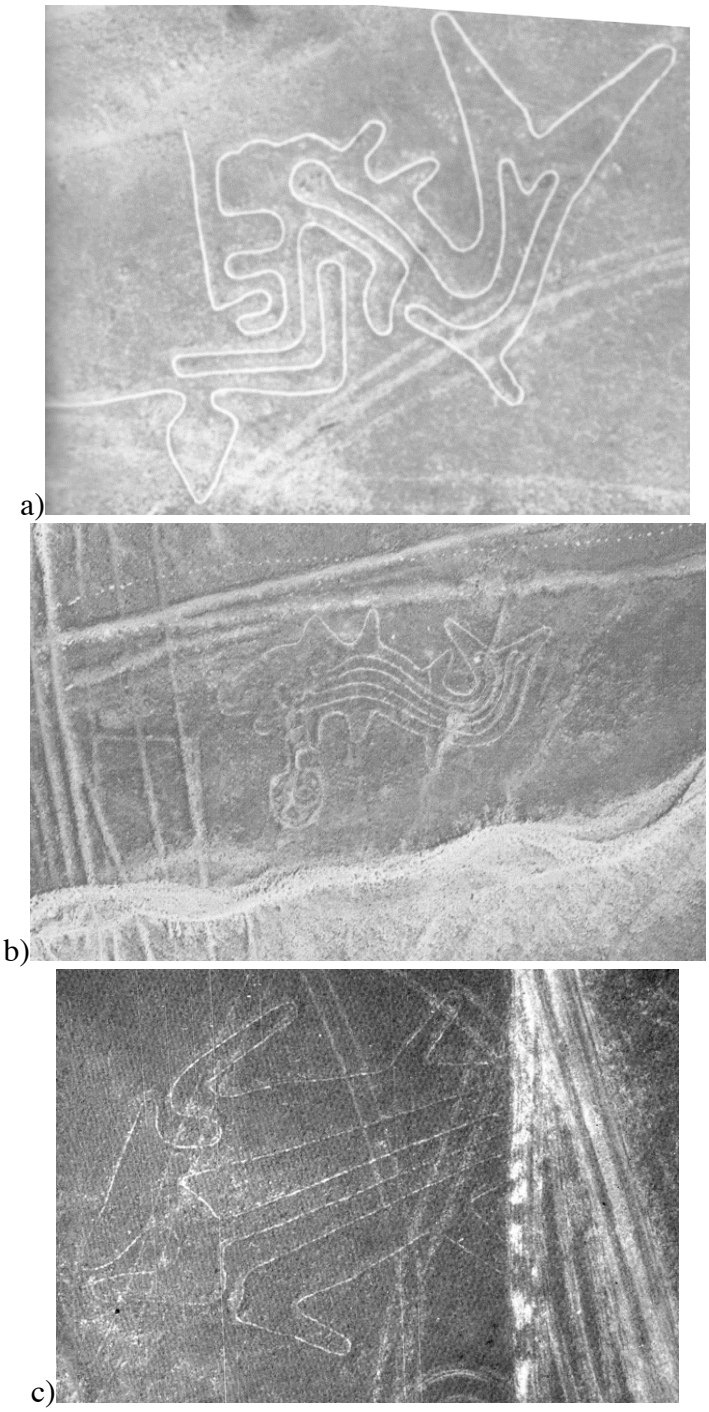


Figure 6.37: Marine animal geoglyphs on the Nasca Pampa: a) Mythical Killer Whale or Aquatic Composite Being (Kern and Reiche 1974: Fig. 102); b) Mythical Killer Whale or Aquatic Composite Being (Kern and Reiche 1974: Fig. Fig. 98); c) Marine animal (Reinhard 1988a: Fig. 59)

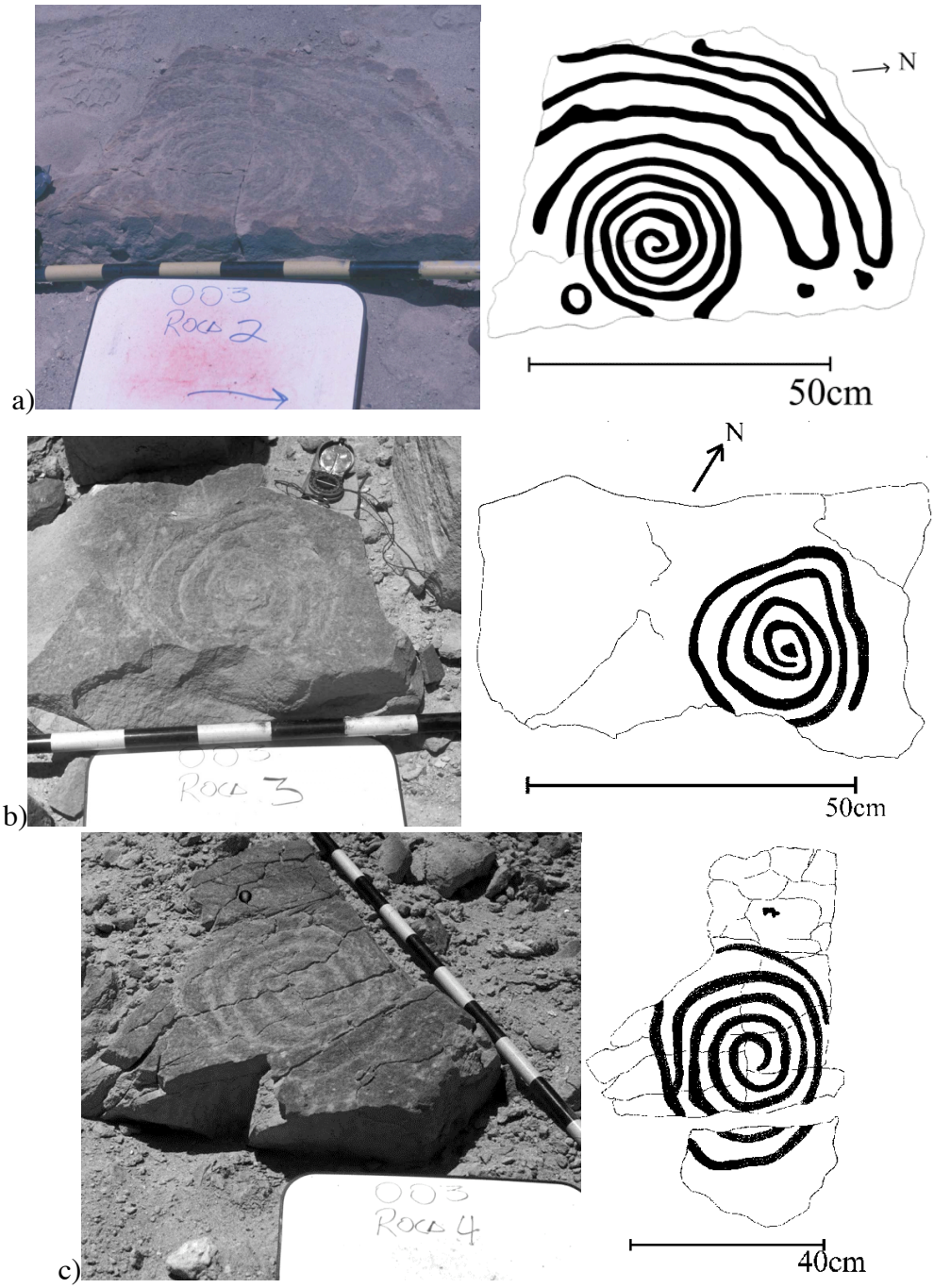


Figure 6.38: GROUP F: Spirals: Site X03: a) Rock 2; b) Rock 3; c) Rock 4 (photos and drawings: Ana Nieves

Figure 6.39: GROUP G: Site RN50, Rock 1 (drawings: Ana Nieves)

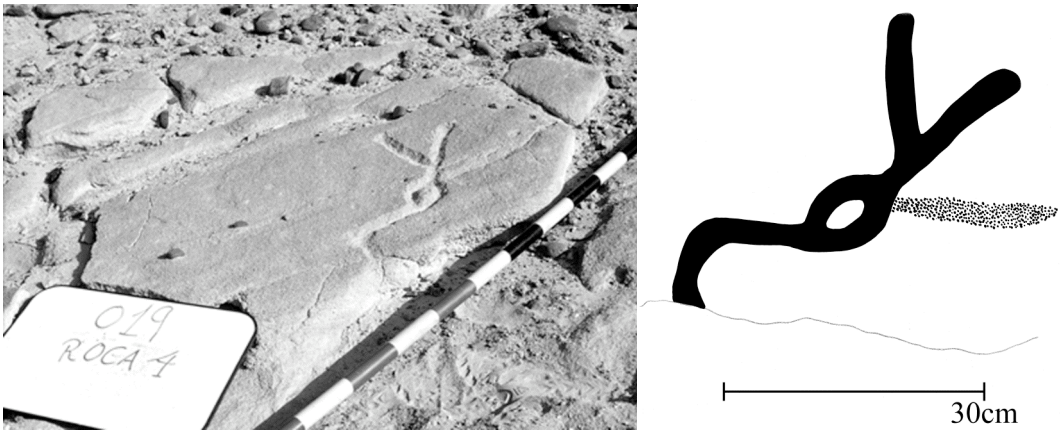


Figure 6.40: GROUP H: Site X19, Rock 4 (photo and drawing: Ana Nieves)

Figure 6.41: GROUP H: Site X21, Rock 6 (photo: Ana Nieves)

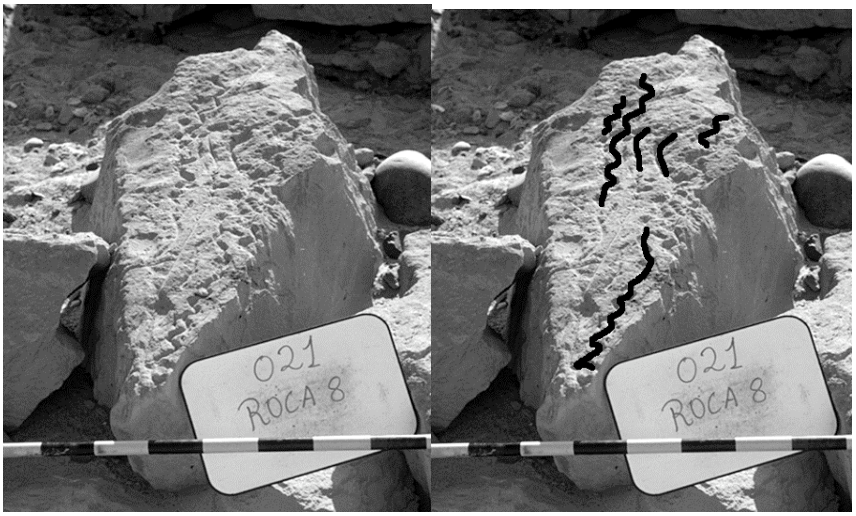


Figure 6.42: GROUP H: Site X21, Rock 8 (photo: Ana Nieves)

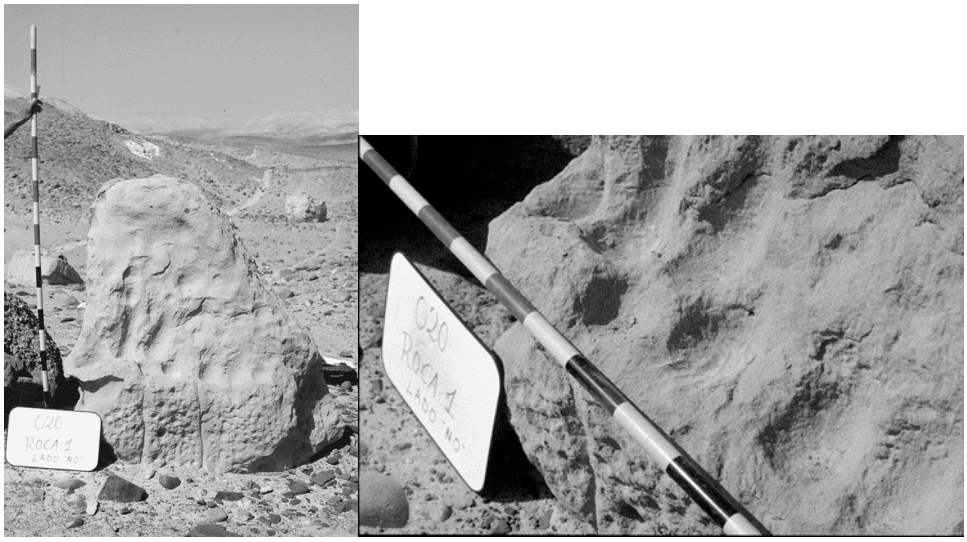


Figure 6.43: GROUP G: Site X20 (photos: Ana Nieves)

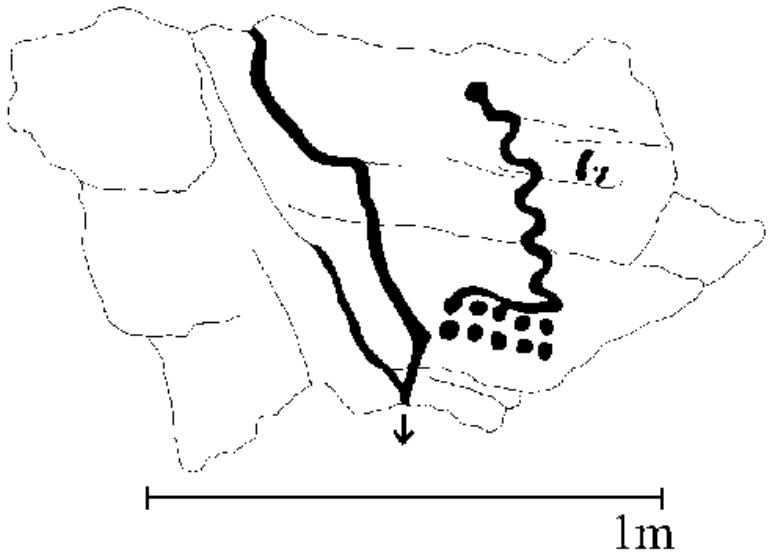


Figure 6.44: GROUP G: Site X16, Rock 2 (drawing: Ana Nieves)

Figure 6.45: GROUP I: Site of La Caseta, Santa Cruz Valley (Núñez Jiménez 1986: Fig. 1930)

Figure 6.46: GROUP J: Site X02, Rock 3 (photo and drawing: Ana Nieves

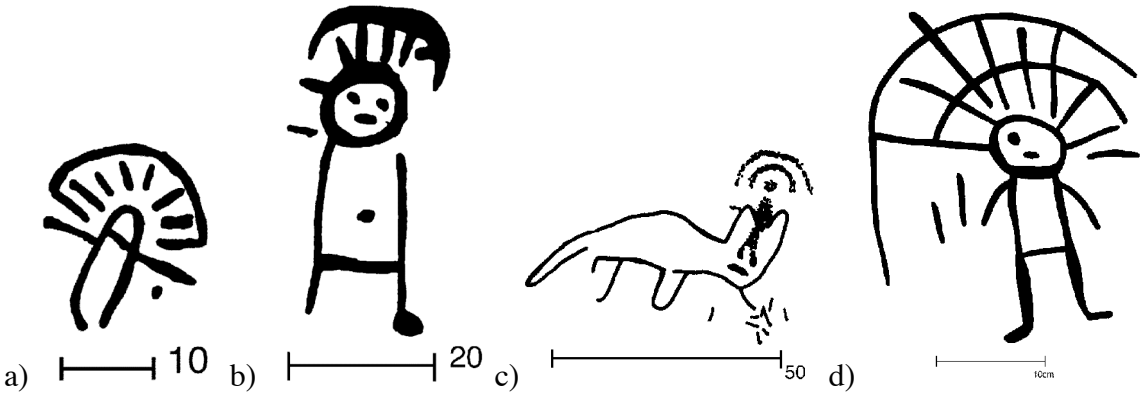


Figure 6.47: GROUP K: a) Site X02, Rock 1, Feature IV; b) Site X02, Rock 1, Feature 2G; c) Site X02, Rock 1, Features 2E[feline]/2F[anthropomorph]; d) Site X03, Rock 7 (drawings: Ana Nieves

Figure 6.48: GROUP K: Chichictara, Sector I, Rock 10 (photo: Ana Nieves

CHAPTER 7 : ROCK ART SITE LOCATIONS AND CHRONOLOGY

Within the Grande River System, rock art found outside of the Nasca Valley (in Palpa, Aja and Santa Cruz) is focused at specific, widely separated, sites. By contrast, in the Nasca Valley survey area rock art sites are disseminated along 20 km of the lower portion of this valley and within the valley's flanking *quebradas*. This chapter focuses on the importance of location of Nasca Valley sites in relation to chronology. It begins by comparing the iconographic groups proposed in the previous chapter with the surrounding archaeological material. For each of the main areas of rock art in the Nasca Valley, site locations are plotted in relation to the datable material documented in Proulx's settlement pattern survey of this valley. The chapter also addresses the regional distribution of some iconographic types within the river system.

Nasca Valley Rock Art Site Locations and Associated Remains

In order to get a better sense of the survey area, the descriptions will follow the course of the Nasca River. As mentioned in Chapter 5, three main areas of rock art sites were identified in the survey area: the Northern Cluster, the Central Area, and the Southern Cluster (Fig. 7.1). For detailed maps of the Nasca Valley rock art sites and associated remains, by chronological period, see the figures at the end of Appendix A.

Upstream from the Nasca Valley survey area is the site of Cahuachi, a large ceremonial center (for more information about Cahuachi, see Silverman 1993 and Orefici 1992 and 1993). This site, particularly active during early Nasca times, consists of

modified hills and open plazas. Silverman (1993) has argued for a ritual function of this site. According to Silverman, the site was a pilgrimage center during early Nasca times. It was eventually abandoned as such and used as a cemetery by later cultures. To the north of Cahuachi, and to the northeast of the survey area is the Nasca Pampa and its high concentration of geoglyphs. Geoglyphs can also be found south of Cahuachi, in the Pampa de Atarco (Silverman 1993).

Southern Cluster

The Southern Cluster is located near the confluence of the Nasca River and Quebrada Usaca, a dry stream bed covered with huarango trees and flanked by large sand dunes. Even during the drier months, I noted that water seeps to the surface of the Nasca Valley in the immediate vicinity of the Southern Cluster.

The rock art sites that constitute the Southern Cluster (Fig. 7.2) consist of Proulx's site RN43, which is located on the southwest side of the valley, as well as four more sites on the opposite (northeast) side of the valley. Following the direction of the river, these are X03, X04, X05 (NW and SE sides) and X08.[43] RN43 was chosen as the easternmost limit of the petroglyph survey since Haciendas Estaquería Alta and Baja are only about 3 km upriver and to my knowledge there have been no reports of rock art in the areas of Cahuachi, Estaquería, or Tambo de Perro.

Southern Cluster sites are located primarily on the tops of steep hillsides that flank the Nasca Valley. Most of the carved rocks overlook the river. In the case of two

[43] Sites X06 and X07 were omitted after the survey since they only included a few scratched marks that may not have been intentional. For information regarding the location of X06 and X07, consult the original field report (Nieves 2001).

sites (X04 and X08), the engraved stones are within *quebradas*. However, *quebradas* of the Southern Cluster are not as wide or deep as those found further north, in the Central Area. To the northeast of the Southern Cluster sites is the Pampa de Majuelos, one of the large, flat expanses of land that constitute the Nasca Pampa. All but one (RN43) of the rock art sites are on the same side of the valley as Pampa de Majuelos. This indicates a very strong correlation between the rock art sites and the *pampas* near the Southern Cluster.

Sites X08 and X04 are very small, consisting of a single carved rock each, but other sites are more complex. Sites X05 and X03, for example, contain petroglyphs of different styles, scales and subject matter: anthropomorphs of different types (some of which are also found in the Central Area), zoomorphs, and some geometric forms. Relatively few of the Southern Cluster petroglyphs seem to fit into the iconographic groups described in the previous chapter. Site X03, described below, had petroglyphs belonging to Group B (motifs with crossties to Cavernas and Ocucaje ceramics), Group K (figures wearing semicircular headdresses), and Group F (motifs with crossties to Nasca material). This would place this site between Early Horizon 8 and the middle of the Early Intermediate Period. Other sites are not as easily dated to phases in the South Coast chronology and may post-date the Early Intermediate Period, especially considering the amount of Middle Horizon and Late Intermediate Period material present in the area.

Sites X03 and RN43 each have a motif that is unique to that specific site. At Proulx's site RN43, which may have served as a habitation site and cemetery (Proulx

1999), these unique petroglyphs consist of oval shapes arranged linearly on one or both sides of a line. The linear arrangement of these oval forms suggested the shape of teeth to Proulx, who also believed these petroglyphs showed Chavín influences (personal communication). However, after tracing these motifs it became evident that these were not "chavinoid" teeth. If these petroglyphs are representational, they more closely resemble highly stylized plant forms.

These petroglyphs are all grouped together on a series of large boulders that face the Nasca River. There is a black smoke stain (Shane Valentine, personal communication) on one of the rocks that indicates some kind of burning activity around the petroglyphs. Ceramic evidence indicated that the site may have been active in the Early Horizon, the Early Intermediate Period (Nasca 3), and the Late Intermediate Period. It is difficult to determine to which of these periods one can attribute the petroglyphs at the site, since their iconography and style do not resemble motifs in the art of any of these periods. However, the iconography is firmly associated to this site in particular, since these motifs do not appear elsewhere in the survey area or in sites in adjacent valleys.

At X03, the unique motifs are Group F (possibly Nasca-related) spirals. Although spirals are not uncommon among Nasca geoglyphs, they are rarely seen among petroglyphs in the south coast. The only other spiral in the drainage is in Chichictara.[44] As mentioned in the preceding chapter, this suggests a date in the Early Intermediate Period for some of the petroglyphs at this site. This is also the site with Group B figures (figures related to Ocucaje and Cavernas material, specifically those with bifurcated

[44] Outside of this river system, the closest petroglyph of a spiral is at the site of Huancor, in Chincha.

headdresses) and Group K figures (figures with semi-circular headdresses). The first of these has been attributed to the late Early Horizon. In other words, on the rare occasions that the Southern Cluster rock art motifs have crossties with datable material, the sites are linked through these comparisons to the Early Horizon and the Early Intermediate Period.

Other archaeological sites near the juncture of the Nasca River and Quebrada Usaca have remains that date from the Early Horizon to the Late Intermediate Period. Overall there are few Early Horizon remains near the Southern Cluster in general. Early Horizon material has been found on the opposite side of the valley, closer to site RN43, where Donald Proulx documented Early Horizon cemeteries and habitation sites.

At the confluence of the Nasca River and Quebrada Usaca there are three Nasca habitation sites and 12 cemeteries with Nasca remains. This indicates this area was particularly active during the Early Intermediate Period. Most of these sites are located in the southwest, or opposite, side of the Nasca valley than the rock art sites.

A cluster of Middle Horizon cemeteries is found downriver, also mostly on the southwest side of the valley opposite the rock art sites. Nine cemeteries and two habitation areas around the Southern Cluster also had Late Intermediate Period remains. The cemeteries in the immediate vicinity of the rock art sites date to the Middle Horizon and the Late Intermediate Period. And, in fact, even if Early Horizon and Early Intermediate Period imagery is present in the Southern Cluster rock art sites, the ceramic sherds found scattered around X03 were actually dated to the Late Intermediate Period. There are no Late Horizon (Inka) remains documented in this area.

To summarize, Southern Cluster rock art sites tend to be associated with multiple occupation cemeteries particularly active in the Early Intermediate Period, Middle Horizon, and Late Intermediate Period. Most of these cemeteries tend to be on the side of the valley opposite the majority of the rock art sites. Although some of the rock art imagery is comparable to Early Horizon and Early Intermediate Period material, the sites were undoubtedly accessible in later periods and there is evidence that they were visited by Middle Horizon and Late Intermediate Period inhabitants of this portion of the valley. However, at this stage, it is impossible to determine if some of the petroglyphs date to the Middle Horizon or to the Late Intermediate Period.

No geoglyphs have been documented on the Southern Cluster sites, although the Pampa de Majuelos is likely to have some.[45] The geoglyphs in Central Area's Quebrada Majuelos are a short distance away (2 to 4 km). At the same time, the location of the rock art sites on the northeast side of the valley links the Southern Cluster petroglyphs to the Nasca Pampa.

Central Area

The Central Area (Fig. 7.3) has been divided in the present study into northeast and southwest sections. These are divided by an obvious geographic feature, the Nasca River, but also differ in topography and site characteristics. On the southwest side of the valley, the *quebradas* are narrow, short, and in some cases very sandy. The rock art sites of the southwest section of the Central Area are X09, X10, X11, X12, and X14, following

[45] For my survey I did not request permission to work on the *pampas*, since these areas do not contain large boulders or rock strata that could be used for the making of petroglyphs or pictographs.

the direction of the river. These are small sites, mostly consisting of a single engraved boulder. X09 includes examples of two Group C felines (related to Cavernas and Ocucaje textiles) facing the direction of the river. Site X12 has one of the larger representational petroglyphs on this side of the valley, measuring about 80 cm high. This is the only example of a Group D petroglyph with clear iconographic traits linking it to the Oculate Being in Ocucaje painted mummy masks. This same boulder also has a single Group G petroglyph (vulva design). At site X14 there is an example of a Group B bifurcated headdress figure (related to Cavernas and Ocucaje ceramics) in association with two other anthropomorphs with clearly indicated navels. Most of these petroglyphs are comparable to material from the late Early Horizon with the exception of the Group G vulva design, which may fall under the middle Early Intermediate Period. There are designs which are impossible to date iconographically at sites X11 and X10. With the exception of X11, which consists of two boulders, sites of the southwest side of the Central Area consist of a single boulder each.

The northeast side of the valley presents a drastically different landscape. This side has large, wide *quebradas* that lead to the *pampas* to the east and northeast. These *quebradas* do not carry water and have no arable land within them. Some of these *quebradas* split into two or three branches. The largest of these *quebradas* is Quebrada Cangana Majuelos. Rock art sites in the northeast side of Central Area are located well within the *quebradas* or near the juncture of the *quebrada* with the valley.

These large northeast side *quebradas* are intrinsically linked to the *pampas* not simply by their location. While inside these *quebradas*, the flanking hills have flattened

tops, revealing the topography of the *pampas* that are located directly above. In other words, inside these *quebradas* one is below the *pampas*, as if a slice was cut into the raised plateau. The base of the *quebradas* is also often covered with the same type of angular stones covered with desert varnish that are so common on the surface of the *pampas*. Therefore, traces of the *pampas* are apparent inside these *quebradas*. Furthermore, just like the *pampas*, some of these *quebradas* have geoglyphs, especially Quebrada Majuelos.

The rock art sites in the northeast section of the Central Area are RN50, QMC14, QMA01, QMB03, RN23, X02, X01, RN51, and X15, from south to north. Rock art sites seem to be evenly spaced in this side of the valley, often consisting of only one site per *quebrada*. The sites on the northeast side are also more complex than those in the southwest side of the valley. They have more rock art covered boulders and more petroglyphs per boulder. They display a greater variety of iconographic motifs within each site and even combine petroglyphs and pictographs within the same boulder.

As one moves downriver, there are two sites that are easily accessed from the riverbed and therefore accessible to arable areas as well. These are sites RN50 and RN23. RN50 is located on the hillsides overlooking the river. Boulders are covered with various zoomorphic and anthropomorphic petroglyphs that largely do not fall under the categories outlined in Chapter 6. There is a high concentration of Group G vulva designs at this site, however, which would place the site in the middle Early Intermediate Period. The ceramic sherds found at the site belong to the Early Intermediate Period and the Late Intermediate Period. There is also a Group H groove at this site.

RN23 is located at the entrance to a *quebrada*. It consists of two boulders with anthropomorphic petroglyphs that do not belong to any of the groups outlined in the previous chapter. One of these figures seems to hold a trophy head on one hand, as the shape he holds resembles the shape of his own head. RN23 is located within a multioccupational cemetery particularly active in the Early Intermediate Period and the Late Intermediate Period.

The rest of the northeast sites in the Central Area are located within the *quebradas* and some require a 1 to 3 km walk from the riverbed to reach them. Quebrada Cangana Majuelos is as wide as the Nasca Valley and splits into several branches that cut into the Nasca Pampa.

Sites QMB03, QMA01 (Proulx's RN49), and QMC14 are all located well within the three branches of Quebrada Majuelos. The distribution of rock art sites within Quebrada Majuelos is interesting, as there is one site per branch of this *quebrada*. Although QMB03 is probably the least impressive of all of the Quebrada Majuelos sites described here due to the small size of its petroglyphs, it may be related to site QMA01 in the choice of a natural cave-like formation for the making of petroglyphs. Site QMA01 (Proulx's RN49) is by far more complex, including several panels of rock art and two different techniques in the making of these petroglyphs, one with deeper carved lines and the other with lightly incised lines, although there is no evidence that would indicate activity at this site outside the Early Intermediate Period. This is the site with Group F (or Nasca-associated) marine motifs and tooth-shaped (or trophy-head) anthropomorphs. The anthropomorph of Site QMA01 is also a site-specific motif. Examples of this figure have

not been found elsewhere in the Grande River drainage. Complexity at QMA01 consists of the combination of small scale petroglyphs with monumental carved representations on the exposed sandstone panels. Panels E and F at this site have very large petroglyphs. Feature A on Panel F, which depicts a Nasca Mythical Killer Whale, measures approximately 2 meters in length. There is also a *campo aclarado* or *campo barrido* (cleared area geoglyph) made on a plateau above this QMA01, flanked by aligned rocks. Finally, site QMC14 in Quebrada Majuelos is also located next to a large area covered by geoglyphs of several types, from *campos barridos*, to lines, to representational images (a grid and an *antara* or panpipe) made by aligning river cobbles. The entire entrance to Quebrada Majuelos has evidence of geoglyphs, however. Some of them have been partially destroyed by mudslides most likely during El Niño years.

As one moves downriver, the next rock art site one encounters is RN23, described above. If one walks into this *quebrada* for a little over 1 km, one encounters rock art site X02.

Site X02 has the greatest variety of iconographic motifs, including Group J rock art (pictographs). These consist of red and yellow motifs including zigzags and zoomorphs. One stone combines pictographs and simple petroglyphs by adding carved "spots" on the bodies of painted quadrupeds. Other carved figures are shown around them but are of later date (they are drawn over the painted camelids). Although some of these site's motifs are datable to the Early Horizon, including Group C felines (with crossties to Cavernas and Ocucaje textiles) and Group B Bifurcated headdress figures (with crossties to Cavernas and Ocucaje ceramics), and others to the Early Intermediate

Period (Group F, or Nasca, marine motifs), broken ceramics in the area indicate activity at this site as late as the Late Intermediate Period. In other words, the amount of activity at X02 indicates that this particular site was visited centuries after the petroglyphs were made.

Moving northwards or downriver, the very next *quebrada* that cuts into the Nasca Pampa has site X01. This site, although smaller, has a *campo barrido* as part of the site. Rocks 1, 2, and 3 are located within the *campo barrido* (Fig. 7.4) and a clear row of evenly spaced stone piles mark the edge of this geoglyph. Ceramic sherds at this site date to the Early Intermediate Period and the Late Intermediate Period but the rock art is not as easy to place within the south coast chronology. The incorporation of geoglyphs and petroglyphs is characteristic of some of the sites that are part of the northeastern side of the Central Area.

The following *quebrada* as one moves downriver has site RN51 over 1 km into the *quebrada*. This site was originally documented by Proulx. It is a particularly large site, has 13 stones with petroglyphs. These petroglyphs are not all of the same style since some are groove or channel petroglyphs, others are very linear representational motifs, and others are representational motifs made with large shapes lightly carved as a silhouette onto the rock's surface. Obviously these very distinct designs were not made by the same hand, and probably not during the same time period.

The very next *quebrada* downstream has site X15, a shorter distance from the riverbed than the previously described X01 and X02. X15 has a single carved boulder with Group H grooves.

Rock art sites on the northeast side of the valley are more closely associated to other archaeological sites such as geoglyphs, cemeteries, and habitation sites than are the sites on the southwest side especially during the Early Intermediate Period and Late Intermediate Period. Overall there are very few remains that date to the Early Horizon, Middle Horizon, or Late Horizon anywhere in the Central Area. By far the most abundant site type in the Central Area are cemeteries and sherd scatters. Cemeteries from both the Early Intermediate Period and Late Intermediate Period are located on the northeast side of the valley near the entrance to Quebrada Majuelos. In fact, cemeteries, geoglyphs and petroglyphs are located in close proximity to each other in the northeast side of the Central Area. On the southwest side of the valley, however, rock art sites are not located near other archaeological sites, and there are no documented geoglyphs in that side of the valley either. Interestingly, however, the sites on the southwest side of the valley are concentrated almost directly across the river from the entrance to Quebrada Majuelos, and there is a good view of this large *quebrada* from some of these sites. This points to the importance of Quebrada Majuelos for the ancient inhabitants of this valley.

As aforementioned, rock art sites in the Central Area are associated with pottery sherd scatters that date primarily to the Early Intermediate Period and the Late Intermediate Period. Although none of the iconography of the rock art can be dated conclusively to the Late Intermediate Period, it is interesting to see that Late Intermediate Period inhabitants of the Nasca Valley were certainly well aware of the location of earlier rock art at Central Area sites, left pottery at those sites, and could very well have made some of the petroglyphs. Interestingly there is also a lack of Early Horizon material in

the entire Central Area in comparison to the abundance of motifs dating to the Early Horizon. Central Area sites X02, X09, X12, X14, and QMC14 all have motifs comparable to Early Horizon material.

The most important archaeological material that is associated with the rock art sites in the Central Area consists of geoglyphs. Some sites, such as X01 and QMA01, have geoglyphs within the sites. Quebrada Majuelos itself is full of previously undocumented geoglyphs that range from single straight lines and *campos barridos*, to radiating centers, to small drawings made by aligning river cobbles. Broken pots still scattered on the surface as well as the parallel pathways that are within the *campos aclarados* are evidence of ritual activity within Quebrada Majuelos.

Northern Cluster

Approximately 3 km downriver from the Central Area is the Northern Cluster of petroglyph sites (Fig. 7.5). The seven sites that constitute the Northern Cluster (from south to north: X16, X18, X17, X19, X20, X22, X21) are located close to the confluence of the Nasca and Grande Rivers. All of the Northern Cluster sites are located on the northeast side of the Nasca Valley either within the quebradas that lead to the Nasca Pampa or overlooking the river. In comparison to rock art sites elsewhere in the survey area, these sites had few representational petroglyphs. Northern Cluster sites are characterized by having a large quantity of Group H petroglyphs (grooves or channels). These grooves or channels are not found in other valleys within the Grande River System. Even within the Nasca Valley grooves are primarily focused in the Northern Cluster, although isolated examples can also be found at sites X15, RN50, and RN51, as

mentioned earlier. Other examples of grooves can be found primarily in the highlands, especially around Cuzco (Hostnig 2003).

The Northern Cluster sites are located east of an area of low hills between the Grande and Nasca Valleys that constitutes a natural pass between them. Further west, as one moves downstream on the Nasca River, the Nasca Valley gets progressively narrower and the surrounding hillsides become higher and steeper, making it difficult to pass between valleys. It was also noted during the survey that, although the Nasca River was mostly dry, water seeped to the surface of the river bed close to the confluence of these rivers, and therefore close to the Northern Cluster.

In the immediate vicinity of the Northern Cluster rock art sites, there is a small, undocumented Nasca cemetery between rock art sites X16 and X17. Other archaeological sites are located within walking distance. Across the Nasca River from the Northern Cluster there are cemeteries with a wide range of remains that date from the Early Horizon to the Late Intermediate Period. Once again, Early Horizon material is scant and is largely limited to two sites on the opposite side of the valley. It is interesting to note as well that there is a lack of remains in this area that date to the Middle Horizon and the Late Horizon. Only one site is reported to have Late Horizon (Inca) remains. Not a single Middle Horizon (Wari) site has been reported in the area of the Northern Cluster or Cerro Colorado. The closest site with Wari remains is located in the Grande Valley, downriver from the confluence with the Nasca River.

To the west and northwest of the Northern Cluster sites there is a large cluster of cemeteries and habitational areas dating to the Early Intermediate Period and Late

Intermediate Period. These sites are both on the low hills that lie between both valleys and on the area known as Cerro Colorado at the confluence of the Nasca and Grande Rivers, specifically on the Grande River side. In this area alone are 13 Nasca cemeteries. The rock art sites of the Northern Cluster constitute a corridor that connects the area of Cerro Colorado to the rest of the Nasca valley. It is also strategically located between both river valleys. As seen in Chapter 6, there is very little in terms of datable iconography in these sites to be able to secure a date for the rock art.

There are geoglyphs in the area of the Northern Cluster and the confluence (Fig. A 46), made primarily by aligning small stones. About 500 meters from X20 are two geoglyphs made in this manner. One consists of three sets of two concentric circles joined at the sides. The other geoglyph consists of two intersecting lines at right angles forming a cross shape. The same type of geoglyphs, based on circular and cross forms and made by aligning stones, has also been found in the Cerro Colorado area (Proulx 1999; Tonya Panion, personal communication). Von Däniken (1998: Figs. 95 and 96) describes and includes photographs of geoglyphs similar to the concentric circle geoglyphs described above from the Palpa valley.

Comparison of Nasca Valley Rock Art Sites to Sites in Other Valleys

It is difficult to determine at this time whether rock art sites in other valleys of the Grande River System fall under the same patterns as those found in the survey area. Rock art sites outside of the Nasca Valley (Fig. 5.1), primarily found in the upper valleys or upstream in the river system (Palpa, Santa Cruz, Aja, Las Trancas), are not spread out over as large a distance along a single valley as those in the survey area. The largest site

outside of the survey area is Chichictara (as well as La Viuda and San Genaro, since they are not far from Chichictara) in the Palpa Valley. Here too rock art is contained within *quebradas*, this time on the eastern side of the Palpa River. In other sites, rock art is concentrated in smaller areas that are widely separated from each other. However, some preliminary relationships can be discussed.

In the upper valleys, rock art can be very close to cemeteries and architectural structures. In the Aja Valley, the sites of San Marcos and Pongo Grande had plenty of surface remains to date its occupation safely to the Early Intermediate Period and Late Intermediate Period, and in the case of San Marcos the rock art is next to *andenes*, or terraces, with circular tombs. At La Viuda, in the Palpa Valley, the remains around the rock art were mostly later, from the Late Intermediate Period and Late Horizon. The associated structures included *andenes* as well. The close location of these architectural remains to the rock art marks a clear distinction with the type of pattern we observe at the Nasca Valley sites. Although cemeteries are close to the rock art in the Nasca Valley, these types of terraces and structures are not as close to the rock art sites within the survey area. The closest comparable situations to those of the Aja and Palpa sites within the survey area are RN23 and RN43.

As in the Nasca Valley, there is also a connection between rock art and geoglyphs in the upper valleys. At Palpa, *quebradas* with rock art sites do not connect with large *pampas* as is the case in the Nasca Valley. However, at La Viuda, there is a *campo barrido* in the vicinity of the petroglyphs. Geoglyphs were associated to the Santa Cruz Valley site of La Caseta, especially trapezoids and straight lines. At La Caseta rock art

was found on boulders at the edge of a small *pampa*. Although the Nasca Pampa is far removed from any of these Palpa and Santa Cruz Valley sites, ancient settlers of these valleys took advantage of slopes and small flat areas of land to fit in some geoglyphs.

Upper Valley and Lower Valley Iconographic Type Distinctions

Although some iconographic types are distributed throughout the river system others clearly belong to either the upper portion of the river system or the lower portion (the Nasca Valley), marking a clear distinction between these areas. This section addresses possible explanations for these regional differences, taking into consideration landscape, chronology, and possible socio-political divisions. Although it is impossible to determine absolute contemporaneity between rock art sites, this section explores this regional division of motifs and proposes possible explanations for this distribution.

Differences in style may be attributed to the types of rocks on which the rock art is made. Sites at Aja have petroglyphs that differ in appearance and style from those in the Nasca Valley, for example. Rocks are igneous at Aja as opposed to the sedimentary rocks in the Nasca Valley. At Santa Cruz's La Caseta, rocks are covered with desert varnish that is lightly scraped in order to make the petroglyphs. This is definitely not the case in the Nasca Valley. However, some sites that are located in the upper portions of this system also have sedimentary rocks and yet the types of motifs found there are different than those in the survey area. Although the differences in rock types may explain differences in technique or even style, they cannot explain the differences in the choice of iconographic types at these various locations.

Figure 6.1 demonstrates that some iconographic motifs are largely restricted to either the upper or the lower portions of the valleys in the Grande River System. There are differences in the traits of felines, for example. Felines in the upper valleys tend to have an iconographic connection to Cavernas and Ocucaje resin painted pottery, while those in the Nasca survey area have a stronger connection to Cavernas and Ocucaje textiles and Necropolis Linear Style embroideries. These styles are contemporary during the Early Horizon 9-10. In fact, Groups A through E in Chapter 6 all can be dated to the Early Horizon. However, with the exception of the figure with the bifurcated headdress, these rock art types fit neatly into two larger groups: one in the upper portions of the Grande River System valleys (Groups A, B, and E) and another in the lower valleys (Groups C and D). It would be impossible to prove that all of these sites were active at a specific point in the Early Horizon and that this distribution of motifs reflects a greater socio-political division of these valleys. However, this neat distribution of rock art into either upper or lower valley types is also reflected in other motifs, some of which are later.

Absent in the Nasca valley is an iconographic type to be defined here as the Group E (related to Paracas Necrópolis Block Color) Seated Figure Iconographic Complex. No examples of this type of figure were found in my survey area. Representations of these seated anthropomorphs are found in the Palpa and Aja Valleys. At Palpa, they are in Chichictara and La Viuda. This type of figure is a motif exclusively limited to the upper valleys. The large spotted snakes of Palpa and Santa Cruz have not been found in the Nasca Valley survey area either.

Conversely, marine animals belonging to Group F (Nasca-related) are not found among the petroglyphs outside of the Nasca Valley. Even at a large rock art site like Chichictara, any types of fish, whales, orcas, or other marine creatures are notably missing. Petroglyphs of Nasca marine motifs in are therefore also a lower valley phenomenon.

This distinction in iconographic types between upper and lower valleys (Fig. 7.6) may be simply indicative of the landscape characteristics or to the access that the people in these areas had to specific subject matter. Upper valley sites are on higher hills and are surrounded by visible mountains, which is not the case in the Nasca Valley. Overall water accessibility is better in the upper valleys as well. There is greater accessibility to the highlands from the upper valley sites. Another interesting observation is that upper valley sites seem to have stronger connections to valleys north of the Grande River System, especially the rock art site of Huancor in the San Juan Valley, near Chincha. This perhaps indicates an easier access to the northern valleys from these upper valley sites. This relationship should be explored further, as should the relationship between upper valley sites and rock art sites in the highlands due to their accessibility from this area.

By contrast, the lower valley areas (Nasca Valley in particular) are drier and water is rarely seen on the surface of riverbeds. Sites are closer in proximity to the *pampas* and not the mountains, which may explain the link of these petroglyph sites to the nearby geoglyphs. Perhaps one of the reasons for the abundance of marine motifs among Nasca Valley petroglyphs (and their absence in the upper valleys) may simply be the location of the Nasca Valley, which is closer and more accessible to the ocean. The drier conditions

in the lower valley may help explain the evidence of pouring rituals (grooves) as these petroglyphs are not present in the upper valleys either.

There are other possible explanations for these variations in iconographic types. Specific chiefdoms or *ayllus* could be responsible for some of the rock art motifs. *Ayllus* are basic Andean social groups, often related and tied to specific locations. They work together as a unit to organize religious rituals or community projects. One possibility for the regional distribution of these motifs would therefore be that some of the symbols depicted in the rock art were associated to particular chiefdoms or *ayllus* in this area. The rock art distribution would therefore indicate the distribution of local chiefdoms or *ayllus*, which would not necessarily be contemporaneous to each other. Silverman has argued for the existence of *ayllus* in Nasca society. Silverman proposed that Nasca culture *ayllus* from various parts of the drainage are responsible for many of the mounds at Cahuachi. Based on ethnographic comparisons, she argued that people from these *ayllus* would conduct pilgrimages to Cahuachi and have elaborate rituals at the site (Silverman 1993; Silverman and Proulx 2002: 244). Following Sallnow (1981), she states that pilgrimage in Nasca times served to reinforce people's identification to their own local group (Silverman and Proulx 2002). Groups that would live apart from each other would come together at pilgrimage sites and express their local identities through dress and performance (Silverman 1993: 316-317). Rituals at Cahuachi therefore helped reinforce social and territorial divisions (Silverman and Proulx 2002: 245). *Ayllus* are only safely attributed to the Late Horizon, however, and their existence is very difficult to demonstrate in earlier periods. Nevertheless, rock art sites could still be expressions of

the identity of local groups and could have served as local *huacas* lnking local groups to specific locales.

Conclusions

There seems to be a strong correlation between rock art sites in the entire survey area and cemeteries from the Early Intermediate Period and Late Intermediate Period. There is also a strong correlation between the location of rock art sites and the location of geoglyphs. In general, most rock art sites in the Nasca Valley survey area are primarily located in the northeast side of the valley, the side that borders the large Nasca Pampa that is the site for the greatest concentration of geoglyphs in the Peruvian south coast. In the Central Area rock art sites are either at the entrance of or well within the *quebradas* that connect the valleys to these *pampas*, and the base of these *quebradas* are in turn covered with geoglyphs. Quebrada Majuelos in particular seems to have been an important locale not only for the making of geoglyphs but also for the making of petroglyphs.

Although there is rock art at sites X02, X03, X09, X12, X14, and QMC14 that is comparable to Early Horizon material, there are surprisingly few archaeological sites that have been dated to this period in the survey area. There is an abundance of sites in the lower Nasca Valley with Early Intermediate Period and Late Intermediate Period remains. Sites QMA01 and X02, and possibly X03, X12, RN50, and RN51 have Early Intermediate Period iconography, but it is difficult if not impossible to argue that any of the rock art there was made in the Late Intermediate Period based on form and syle. When sites have ceramic sherds scattered around the rock art, these usually dated to the

Early Intermediate Period and the Late Intermediate Period. The abundance of material from these two periods could be attributed to an increase in population during those times, as suggested by Silverman (1994). From my survey findings I conclude that rock art sites began to be made in this area during the latter part of the Early Horizon, continued smoothly into the Early Intermediate Period, in coordination with the use of geoglyphs. Late Intermediate Period inhabitants of the Nasca Valley continued to visit and interact with these sites, although whether their meaning changed through time is difficult to determine.

Additionally, rock art iconography shows a regional distribution, as iconographic motifs belong to either the upper valleys or the lower valleys. Although the exact nature of these divisions, and how they changed through time, cannot be determined at this time.

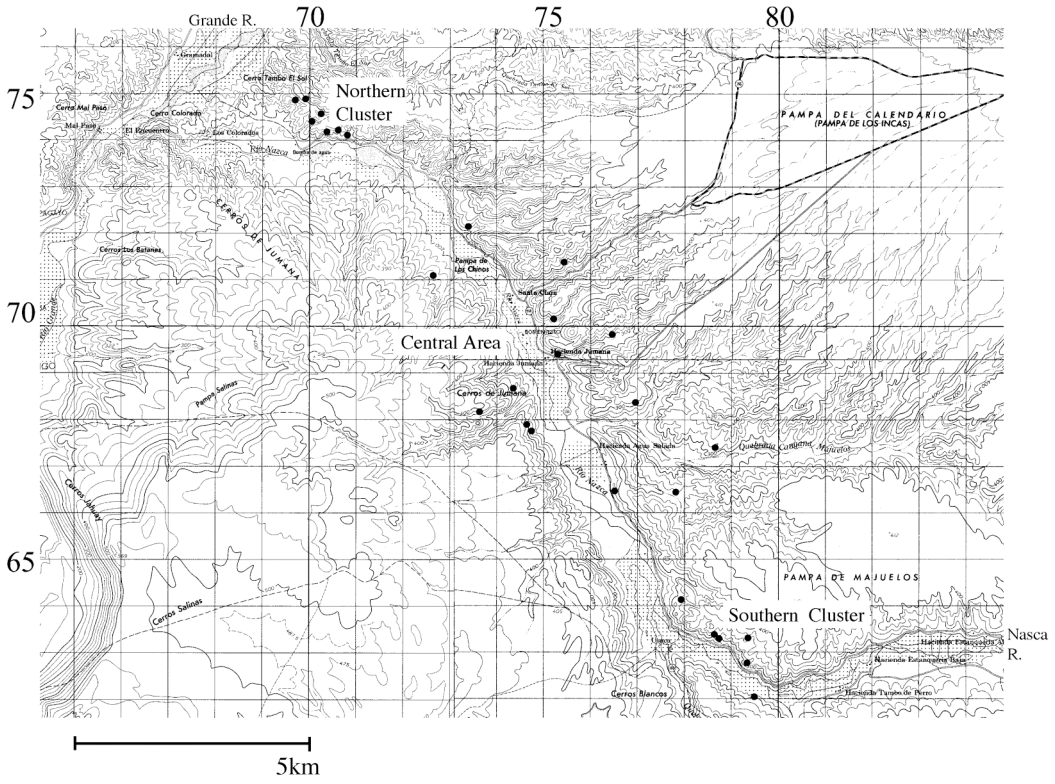


Figure 7.1: Map of Nasca Valley survey area. The Northern Cluster, Central Area, and Southern Cluster sites are indicated.

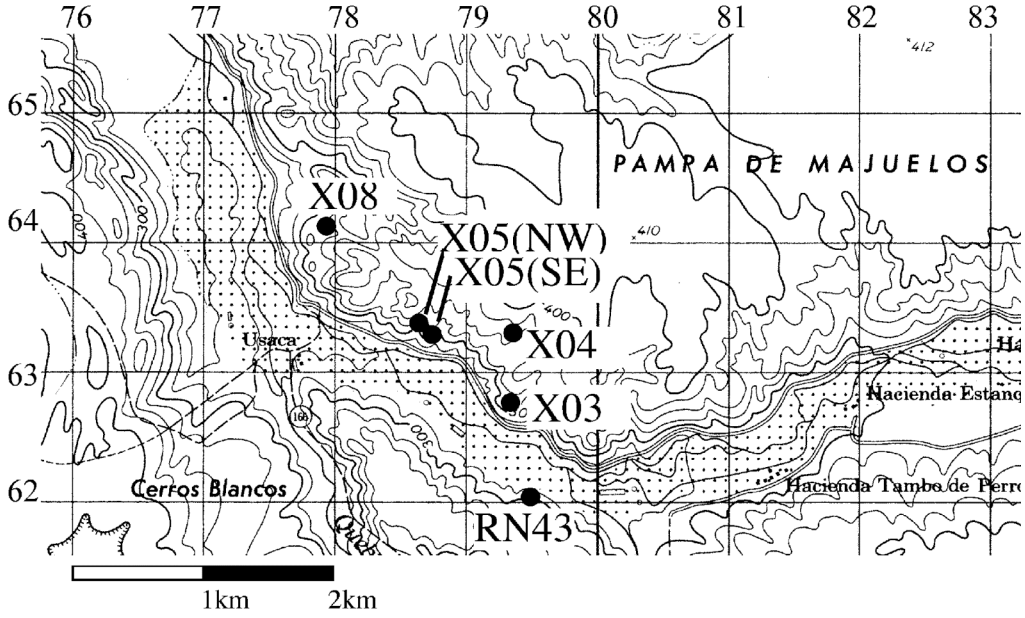


Figure 7.2: Southern Cluster sites.

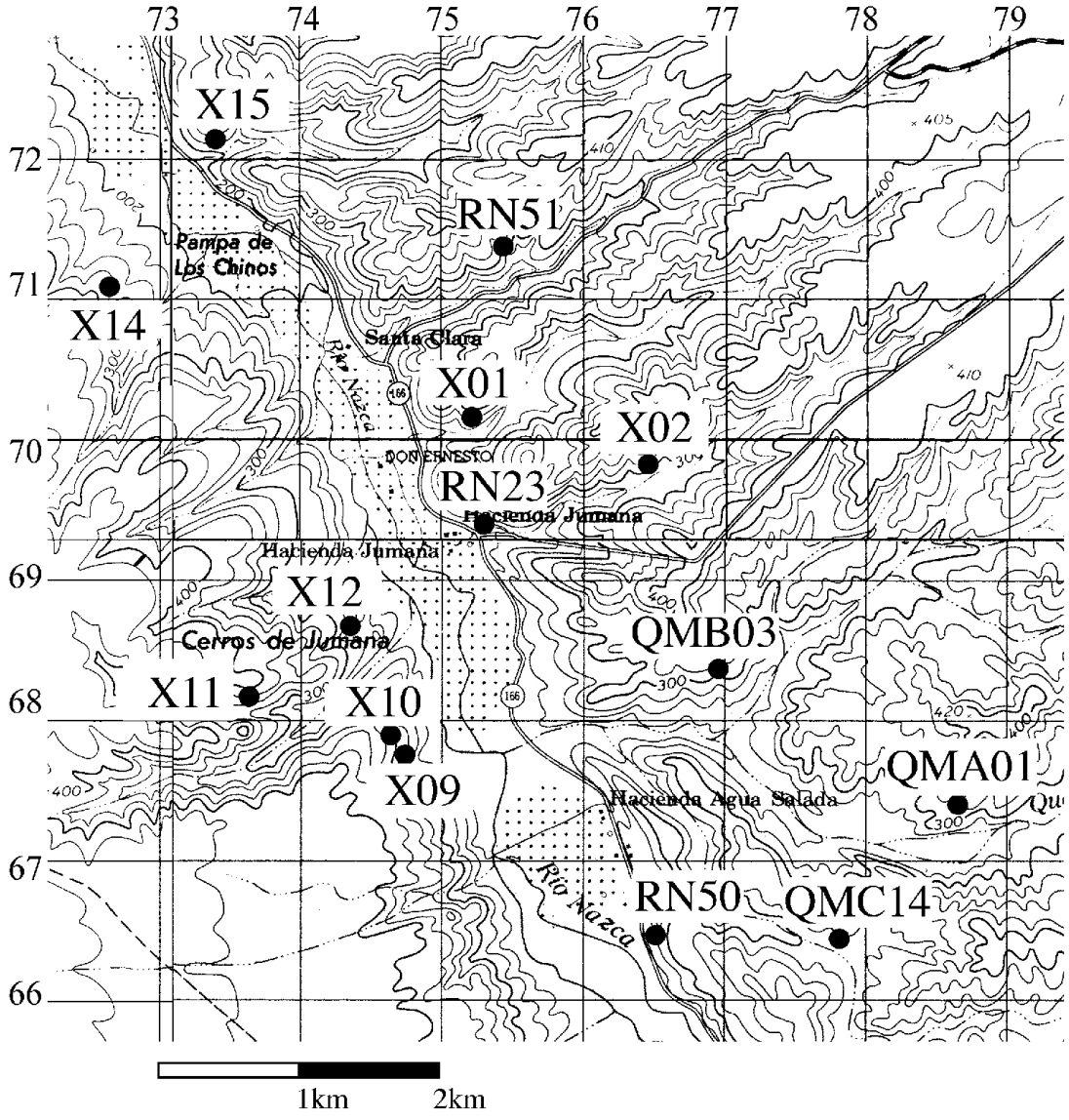


Figure 7.3: Central Area sites.

Figure 7.4: Central Area, Site X01. Composite photo showing *campo barrido* (photo: Ana Nieves)

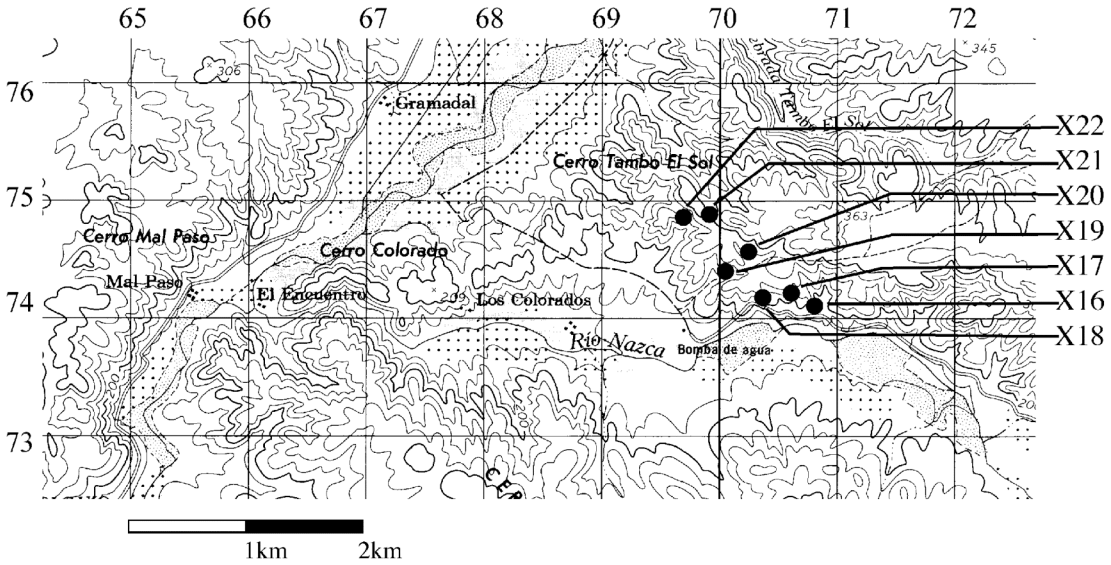


Figure 7.5: Nothern Cluster sites.

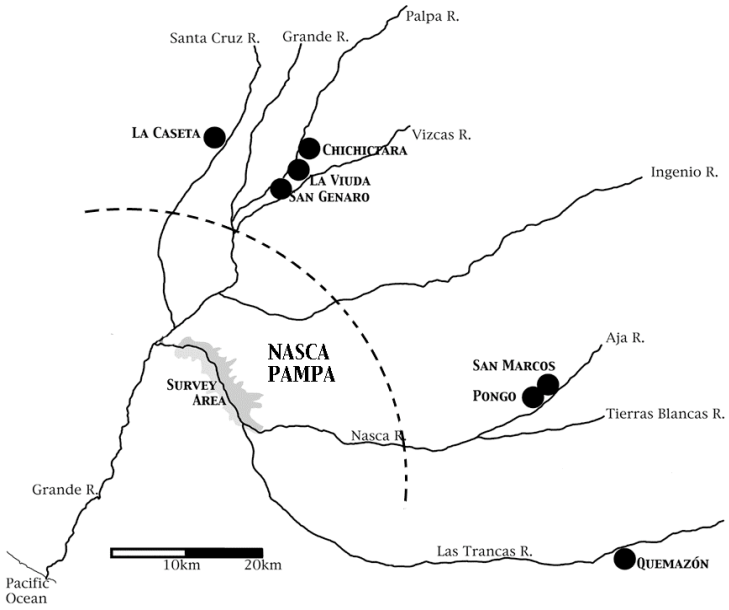


Figure 7.6: Map showing upper and lower valley distinctions in rock art iconographic types.

CHAPTER 8 : TRANSITIONS, LIMINALITY, AND NASCA VALLEY ROCK ART SITE LOCATIONS

Although there are many groups of broken boulders within the numerous *quebradas* that flank the Nasca Valley, relatively few rocks were covered with petroglyphs, and even less with pictographs. In this chapter I will examine the possible reasons for rock art site selection in the Nasca Valley. In doing so I will put these sites in the context of the sacred landscape and liminality. I argue that liminality is an important quality of significant landscape features in the Grande River System and that the same pattern is apparent in rock art site locations.

Liminality

Van Gennep (1960) first addressed the concept of transition in his analysis of the *rites de passage* (loosely translated as "rites of transition"), originally published in 1908. According to Van Gennep *rites de passage* may be divided into a tripartite structure: a pre-liminal phase of separation, a liminal phase of transition, and a post-liminal phase of reincorporation. The liminal state, however, acquires a certain autonomy and is considered a separate entity in its own right. Turner (1967) elaborated on the ideas posited by Van Gennep, referring to the liminal state as existing "betwixt and between," having characteristics of both and of neither, and being outside of a culturally-defined structure.

Van Gennep also addressed the idea of liminality as applied to physical locations. In such a situation, liminality refers to boundaries (or frontiers) and physical thresholds. According to Van Gennnep, boundaries are marked with significant signs. However, these signs are not made along the entire boundary. Instead, these marks are located at significant locations, "only at points of passage, or paths and crossroads" (Van Gennep 1960: 17). It is this kind of transitions, boundaries, and liminal spaces that are addressed in this chapter.

The Sacred Landscape and the Andean Region

It is no surprise that in the Nasca area, as in many areas of the world, landscape features have acquired a significance that transcends the practical, i.e. landscape features are more than simple geographic landmarks, they have cultural meaning. These "non-economic perspectives on human-land relations" (Knapp and Ashmore 1999: 1) have been termed as "sacred landscape." Rock art, as an art medium permanently incorporated into the surrounding landscape, is intrinsically linked to local ideas regarding the sacred landscape. Rock art sites are places that combine what Knapp and Ashmore (1999: 10-11) have classified as Conceptualized Landscapes (i.e. natural features that have been charged with meaning) and Constructed Landscapes (anthropic or man-made). As stated by Taçon, "it is this form of ancient human activity that is most linked to early perceptions of landscape- the very location and organizational structure of rock art speaks of human relationships to places and spaces" (Taçon 1999: 34).

Andean and Inka constructions of sacred landscapes share common characteristics with those in other areas of the world. Taçon described some general characteristics regarding conceptions of the sacred landscape as follows:

> In areas of the world where ethnographic or historic information is available we know that certain landscape features invoke common responses in human beings-feelings of awe, power, majestic beauty, respect, enrichment among them. Most commonly these subjective feelings occur in response to perceiving four types of places: (a) where the results of great acts of natural transformation can be best seen, such as mountain ranges, volcanoes, steep valleys or gorges; (b) at junctions or points of change between geology, hydrology, and vegetation, or some combination of all three, such as changes in elevation, waterfalls, the places where rainforest meets other vegetation; (c) where there is an unusual landscape feature, such as a prominent peak, cave, or hole in the ground that one comes upon suddenly; and (d) places providing panoramic views or large vistas of interesting and varied landscape features (Taçon 1999: 36-37).

It should not be a surprise that the landscape features that form Andean and Inka sacred landscapes fall in essentially each of the categories listed by Taçon. Mountains and volcanoes, junctures, unusual landscape features, and places with large vistas are all important in Inca and Andean constructions of the sacred landscape. In the Andes, landscape features that look different are often considered *huacas*, i.e. sacred places or things. The importance attached to difference is what van der Guchte (1999) has labeled an "aesthetic of alterity." In Andean and Inka worldviews, the landscape is animated. Landscape features often embody sacred beings or exist as physical evidence of their activities.

Liminality and Landscape in the Nasca Valley

Although the ancient inhabitants of the Nasca Valley did not leave a written record explaining what landscape features were significant and why, an emic understanding of the cultural/religious/ritual importance of specific landscape features

can be approached through the study of the archaeological record and comparative ethnographic material. On the one hand, this evidence points out that specific landscape features in the Grande River System, as in the rest of the Andes, those that stood out or were different, took on a sacred aspect. For example, Silverman and Proulx (2002: 115) noted that during the Nasca 2 phase, bilobal (U-shaped) hills that apparently functioned as *huacas*, or sacred places, were incorporated into architecture. This happened in Silverman's Ingenio Valley Site 106 as well as in the Nasca Valley site of Cahuachi. On the other hand, significant landscape features in the Grande River System also appear to have had a mediating role, or served as transitional places due to their liminal qualities. The following are examples of Nasca Valley landscape features that appear to have served a mediating function.

Cerro Blanco

In the Nasca Valley a sand dune topped mountain called Cerro Blanco (Figs. 8.1 and 8.2) located near the modern city of Nasca has been an important landscape feature for thousands of years. This mountain stands out in contrast with the surrounding landscape due to its light color (hence its name, which means "White Hill"). As described by Clarkson (1985),

> The most prominent peak [in this area] is Cerro Blanco, standing 2070 m high. Situated 12 km east-southeast of the town of Nazca, the top eleven hundred meters of this mountain are comprised of Quaternary age eolian sands that give it a white or buff colour, depending upon ambient light. This light-coloured peak stands in sharp contrast to the dark brown colour of the surrounding mountains. (Clarkson 1985: 5)

The sand that tops Cerro Blanco makes this mountain resemble a huge sand dune from a distance.

Along Cerro Blanco's slopes there are scattered potsherds (Fig. 8.3) that date from the Early Horizon through the Late Horizon. There are no looting holes, cemeteries or structures on the slopes near the concentrations of sherds. Virtually every cultural period is represented in these ceramic sherds. More importantly, the sherds I personally observed along Cerro Blanco's slopes were not from domestic wares. Most of the sherds were once part of finely decorated pottery, slip-painted or incised. Although we can never be sure whether this mountain's role in local myths and rituals remained constant throughout this long span of time, it is certain that people traveled to its peak for hundreds of years and left fine pottery on its slopes because they found this mountain to be significant.

Among landscape features, hills and mountains like Cerro Blanco are the most prominent in Andean myths, and as stated above these fall within the first of Taçon's categories. Cerro Blanco's distinct appearance, however, also puts this mountain in Taçon's category of unusual landscape features. Ethnography from the contact period (Inca) as well as modern times indicates that among Andean groups, that which is different within the landscape has attracted much attention and veneration and is considered a *huaca*. The attention paid in the Nasca area to Cerro Blanco, however, indicates that a similar "aesthetic of alterity" as described by van der Guchte (1999) may have been involved in the selection of significant features in the landscape in this valley for centuries before the Inca arrived in the South Coast.

The importance of Cerro Blanco for Nasca Valley inhabitants may have to do with the immediately apparent qualities of this mountain. The mountain is a combination

of highlands and coast. Cerro Blanco's peak rises as high as those of other mountains in the area, but its appearance does not resemble the highlands in any way. Cerro Blanco's peak looks like the landscape of the desert coast. It is both part of the highlands in size and yet coastal in appearance, making it both and neither. It is also located geographically between highlands and coast. Its appearance and location identifies it as a transitional landmark.

Surviving myths about Cerro Blanco are evidence that this mountain's transitional qualities were indeed noticed. In one recorded myth, Cerro Blanco is the wife of the highland lord, Illa-kata (Rossel Castro 1977: 39-41). During a visit to Illa-kata, Tunga, who was the lord of the coast, fell in love with Cerro Blanco and convinced her to leave Illa-kata and go to the coast with him. Illa-kata discovered that he had been betrayed and searched for the fleeing couple. When Tunga realized that he and his loved one were not able to flee fast enough, he covered Cerro Blanco with a layer of corn flour, successfully hiding her from Illa-kata. Illa-kata, in a vengeful rage, created cataclysmic events to destroy all mountains, subsequently turning Cerro Blanco and her corn flour covering into a giant sand dune. Tunga was also transformed. In his case, he became a black iron mountain currently located in Marcona.

In this myth, Cerro Blanco becomes the subject of tension between highlands and coast, ultimately leaving the highlands for the coast and being transformed in the process.[46] She never reaches the coast, though, as her transformation occurs along the

[46] Rossel Castro (1977: 41) states that Cerro Blanco is also known by the name of Illa-kata. This, I believe, reinforces this mountain's ties to the highlands despite its appearance.

way. This would explain its appearance having qualities of both coast and highlands yet belonging to neither as well as its location, between both of these regions. The myth reflects a transitional quality of this mountain, which is also apparent from observation. In myth, appearance and location, Cerro Blanco is, in Turner's words, a "betwixt and between" location.

Cerro Blanco has also been associated to water. This mountain is considered to be the source of all water and riches in the area, characteristics that are apparent in the many myths and stories about this mountain today. There are many variations of the story of a man that enters Cerro Blanco, and finds fertile lands or bodies of water inside. On one, narrated by Reinhard (1988: 16), a man sees a waterfall and a lake inside. On another, narrated by Schreiber and Lancho (1988: 59) he finds a cultivated field inside and is given oranges that eventually turn into gold. In other local legends, Cerro Blanco has also erupted water, and has served to convert the tears of Viracocha, an Andean creator deity, into the underground water that fills the *puquios* today (Reinhard 1988: 16). Reinhard also reported finding evidence of water-related rituals on top of Cerro Blanco, where he found offerings for rain.

Although the aforementioned myths are recent, some facts about the sacredness of this mountain are evident. For one, people visited the mountain, climbed its slopes and left fine pottery there. Second, this type of activity happened for several centuries, as evidenced by the diagnostic pottery found throughout its slopes. Third, Cerro Blanco happens to stand out, fitting with the characteristics of a *huaca* or sacred place, but it is its transitional qualities that are still emphasized in local folklore.

The Nasca Pampa

The Nasca Pampa and the geoglyphs on them are the most obvious evidence in the area of the lasting cultural importance of a landscape feature. This series of large, elevated plateaus in the space between the valleys and the Andes Mountains, were considered a special place for several centuries. This is evident in the high concentration of geoglyphs that have been drawn on the earth's surface and the abundant ceramic sherds that have been found scattered throughout the *pampas*. Virtually every cultural period is represented among the potsherds scattered on the Nasca Pampa surface (Clarkson 1985).

Unfortunately there are no surviving myths or stories in the regional folklore that would indicate the reason why these particular *pampas* were significant. As indicated in the previous chapter, Urton (1990) argued that the Nasca Pampa was strategically located between a northern and a southern moiety, and that the *pampas* constituted a place of interaction between these moieties. Based on this, Silverman (1993: 342) stated that the *pampas* located between the Ingenio and Nasca valleys may have constituted a *tinku* or *tinkuy*, balancing opposing but complementary forces. As indicated by Taçon, junctions tend to be perceived as important places in sacred landscapes. Junctions in the Andean landscape are no exception. The term *tinku* or *tinkuy* refers to the joining of two parts to form one whole (Moseley 2001: 66-67).

Even if this proposition that the Nasca Pampa is a *tinkuy* mediating moieties is questioned, there are indications that ancient populations of the Grande River drainage assigned a mediating or transitional role to these *pampas*. The most evident supporting

data for this involves the amount of connecting linear geoglyphs that cross the *pampas* (see Fig. 2.2). Aerial and satellite photographs such as Figure 2.2 clearly reveal that lines connect *quebradas* between the Nasca and Ingenio Valleys. But the significance of the Nasca Pampa lies well beyond the practical function of providing a flat surface for pathways. People left pottery on the surface of the *pampas* as they crossed. They also made figurative geoglyphs representing animals, spirals, and other forms, and they may have walked on them in a ritual manner.

The Nasca Lines have been explained in terms of ritual movement, since these geoglyphs could have served as pathways for processions. As early as the 1940's some scholars such as Mejia Xesspe (1940) referred to linear geoglyphs as roads or *seques* (more often spelled *ceques*). Later, Kosok and Reiche (1947) noted that representational geoglyphs on the Nasca Pampa were made with a continuous line that never crossed itself, which led them to propose that they were meant to be walked. The trapezoidal geoglyphs, they also argued, could have served as ceremonial centers. *Campos barridos* lend themselves to movement as well. During my survey of Quebrada Majuelos I observed parallel pathways along the length of *campos barridos*. Ethnographic analogy further supported the function of these geoglyphs as paths made for walking, since straight paths that resemble lines leading to hills served to connect religious shrines in the Bolivian Andes (Morrison 1978).

The consistency and repetition of the evidence on the *pampas* are indicative of ritual, defined by Rappaport as the "performance of more or less invariant sequences of formal acts and utterances not entirely encoded by the performers" (Rappaport 1999:

24). The material on the Nasca Pampa indicates repeated actions. Walking did not simply take place from one point to another for practical purposes, but either on very straight lines, or following the shape of an animal, or on parallel paths along the length of a *campo barrido*. The movement of people for ritual purposes has been proposed as an important aspect of the Nasca culture's religious practices. Helaine Silverman (1993) has cogently argued for the existence of pilgrimage among the Nasca during the earlier phases of this culture. Although the aforementioned hypotheses apply primarily to the Nasca culture, the presence of sherds that belong to later periods on the Nasca Pampa attests to the continuous and enduring significance of this space centuries after the Nasca as well.

The Nasca Pampa is both a significant transitional area between valleys, and it also marks the transition between the valleys and the mountains to the east. As a viewer on the Nasca Pampa, one looks east and sees the mountains rising upwards. To the west one does not get this effect and the river valley descends into the ocean. The lower Nasca Valley is therefore below the Nasca Pampa. The rising mountains are above. The pampas are the location between these two vertical directions. Although highly conjectural, observations from the Nasca Pampa suggest that this location also served as threshold and place of mediation.

Mediation, transition, and liminality are traits found in the most significant landscape features of the Nasca Valley. All of the aforementioned landscape features became conceptualized as various cultures, especially during the Early Intermediate

Period and Late Intermediate Period conducted rituals or left offerings at each of these locations.

Liminality and Nasca Valley Rock Art Sites

As was stated earlier, rock art has the unique quality among art forms of being linked directly to its surrounding landscape. Its very existence is evidence of human interaction with a specific place. The selection of these locales for the making of rock art is in line with other local concepts regarding the choice of significant landscape features. Like the aforementioned landscape features, transitions are also evident in the locations of rock art sites in the Nasca Valley. Once more I take as an initial reference point the survey conducted by Donald Proulx (Proulx 1999: 57, 61). After encountering rock art sites QMA01 (RN49 in his survey) and RN51, Proulx suggested that these sites could have served as stops for travelers. Elaborating on this idea, I submit that there is a parallel between Nasca valley rock art sites and the area's significant landscape features. Nasca Valley rock art sites also functioned as important points within ancient constructions of the sacred landscape due to their liminal or transitional qualities.

In the Northern Group and the Central Area in particular, there is evidence that a transitional quality in the location of the rock art sites may have been a factor in rock art site selection. In the Central Area sites seem to be evenly distributed, about one per *quebrada*, especially on the eastern side that leads to the *pampas*. The Northern Cluster's location is near a pass that connects two rivers as well as near significant topographic changes that occur around the Cerro Colorado area. This section will concentrate on these two areas and examine the possible liminal qualities of these locations.

The Central Area Sites and the Southern Cluster

The distribution of Central Area sites suggests that their location was deliberately and carefully selected. Sites X02, RN51, QMB03, QMA01, and QMC14 are all located deep inside the *quebradas*, between 1 and 2 km away from the valley and any arable land or habitation sites. Although broken pottery (both utilitarian and finely decorated wares) is found in the area, there is no architecture, or any other evidence of habitation this deep inside the *quebradas*. These petroglyph site locations were probably not chosen for practical reasons, or to fulfill the economic needs of Nasca valley inhabitants. These sites can also be seen as "in between" places, neither part of the valley nor part of the *pampas* (Fig. 8.4), but between the two, belonging to both and to neither.

A characteristic of the aforementioned Central Area sites is their complexity, unmatched by any other sites elsewhere in the survey area. As it was pointed out earlier, there seems to be a preference in the making of rock art on the northeastern side of the valley. Twenty out of 26 sites covered in my survey were located on this side (Fig. 7.1), including all groove or channel petroglyphs.

But what explains the differences between the northeastern and southwestern sides of the valley in site type and size, especially in the Central Area? What does the northeastern side of the valley have that the southwestern side lacks?

Topographically, the northeastern side of the valley has wider and longer *quebradas*. In the case of Quebrada Majuelos, the *quebrada* is almost as wide as the Nasca valley itself. The only difference between the valley and this *quebrada* is the lack of vegetation in the latter due to the lack of water. However, evidence of human presence

through ceramic scatterings (made in several chronological periods, centuries apart) and the making of geoglyphs and petroglyphs within the *quebradas* on the northeastern side of the valley are plentiful, particularly within Quebrada Majuelos. Therefore, something about these northeastern *quebradas* made them culturally significant spaces throughout the centuries.

From a practical point of view, these *quebradas* are natural entrances or paths that lead into to the *pampas*. It was noted during one of my visits to RN51 that people with horses or donkeys still use that *quebrada* to ascend from the valley to the *pampa* instead of the road used by cars that is located next to it, probably because this is the shortest way to cross the Nasca Pampa in order to get to the Grande River Valley.

Perhaps the most impressive concentration of geoglyphs in the Peruvian coast is in the Nasca Pampa between the Ingenio and Nasca valley, i.e. to the northeast of the survey area. People did not live on the *pampas*, however; they lived within the valleys. If the *pampas* geoglyphs were used ritually, or even if Nasca Valley inhabitants were to simply cross the *pampas* as part of pilgrimages, as described by Silverman (1993), they first had to enter the space of the *pampas* from their usual habitational areas. The most efficient way to get there is by following one of these *quebradas*. These *quebradas* therefore served as natural entrances and corridors connecting the valley and the *pampas*.

The iconographic evidence as well as surface remains at the Central Area sites is evidence for the continuous use of these sites from the Early Horizon, to the Early Intermediate Period, and Late Intermediate Period. The geoglyphs in the Nasca Pampa were also used continuously through the same amount of time.

The association to the *pampa* geoglyphs goes beyond the simple coincidence in the periods in which they were used, however. Aside from these sites' location, the Central Area sites' characteristics and iconography also indicate a strong tie between these petroglyph sites and the Nasca Lines. As was stated above, several of the petroglyph sites on the eastern side of the Central Area have geoglyphs in or around them (sites X01, QMA01, and QMC14). In other sites, the petroglyphs share the iconography with some of the representational motifs among the *pampa* geoglyphs. Sites QMA01 and X02 both have variations on the depiction of the Nasca orca or Mythical Killer Whale, a motif is depicted on two geoglyphs on the Nasca Pampa. Not only is this petroglyph motif limited to the Nasca Valley, it is actually restricted to the northeastern side of this valley.[47]

All of these connections indicate the close relationship between these sites and the geoglyph-covered *pampa*. Whatever the uses of the Nasca Pampa' geoglyphs, the petroglyph sites of the Central Area are spatially, iconographically, and conceptually linked to them.

The rock art sites on the northeast side of the valley in the Central Area are evenly distributed. Only one site is located within each of these *quebradas*. In some cases, these sites are located well within its *quebrada*. This is particularly significant since it indicates that only one location per *quebrada* was considered important enough for the making of petroglyphs. New sites were not made to replace old sites. If petroglyphs were random drawings made by hundreds of people as graffiti, then one would find

[47] The iconography of this motif is addressed in Chapter 9.

petroglyphs everywhere along these *quebradas*, without any pattern to their distribution. This is not the case, however, as order is implied by their layout. Because of this, I argue that these sites were transitional places. In this particular case, these sites mark the transition between the river and the *pampa*. They may have served as stops for those Nasca valley inhabitants on their way to or from the activities that took place on the *pampa*.

These sites are "betwixt and between" locations between river and *pampa*. The *quebradas* in which these sites are located combine characteristics of the river valley (deep gorges made through millennia of water erosion) and the *pampas* (they too are covered with river cobbles that have darkened with desert varnish). In fact, if one looks above the flanking hills inside these *quebradas*, the tops of the hills get progressively flatter as one moves east, and eventually the *quebrada* itself becomes the *pampa*. These Central Area site locations therefore are also liminal, combining both valley and *pampa*. At the same time the *quebradas* were neither part of the valley (they did not have vegetation and were not arable) nor the adjacent *pampas* (they were not flat), making them also "betwixt and between" spaces. These Central Area rock art sites are therefore also liminal in nature. The rock art sites may have indicated this transition. As described by Van Gennep (1960: 17), transitions are not marked along an entire boundary, but at strategic locations. The layout of these sites indicate the importance of one rock art site per path (*quebrada*) suggesting a threshold.

Southern Cluster rock art sites are not located deep inside *quebradas* like the Central Area sites. However, all but one of the Southern Cluster sites are on the *pampas*

side of the valley. I believe this is yet another indication of the close link between the rock art and the *pampas*. The sites here, although on the upper portions of hills, still mark the boundary between the river and the *pampas*.

It is interesting that there are no reports of rock art in the Ingenio River side of the Nasca Pampa. If rock art sites mark the transition between valley and *pampa*, it would make sense to find more rock art there as well. However, there is a higher concentration of representational geoglyphs in the northern edge of the Nasca Pampa. It is quite possible that those mark a transition into the *pampas* as well, although this relationship as well as the absence of rock art in the Ingenio Valley needs to be investigated further.

The Northern Cluster

There are several types of physical transitions that were noted in the area of the Northern Cluster: the transition from one valley to another, the transition from the sandy hills of the Nasca Valley to the distinct red hills of Cerro Colorado, the transition from Cerro Colorado to the *pampas*, and the transition from dry to wet. Seen in this light, the Northern Cluster as a unified area may have been considered a threshold or liminal space. Here I focus only on the first three of these transitions. The fourth of these transitions, the change from dry to wet, will be discussed in the next section of this chapter, where the importance of water will be addressed.

Northern Cluster sites are closer together than any group of sites in the survey area. They also share petroglyph types. This indicates that these sites were more closely associated to each other than petroglyph sites elsewhere in the valley and should be addressed as a group.

The Northern Cluster is at the "entrance" to the area of Cerro Colorado (Red Hill). Cerro Colorado's reddish soil stands out in contrast to the surrounding landscape that consists of light brown, sandy hills (Fig. 8.5). Although much shorter than Cerro Blanco, Cerro Colorado is also visible from a distance. Adding to its importance is the fact that Cerro Colorado is located at the confluence of two rivers. Located at a juncture, and strategically between two rivers, this hill took on an added level of meaning. It is also a point of transition where two entities, the valleys, become one. In fact, Cerro Colorado is still considered an important and powerful location to this day,[48] although we have no surviving myths or legends involving this landscape feature. In this area, Proulx documented several urban centers, habitational sites, and cemeteries dating mostly from the Early Intermediate Period (both early and late Nasca) and the Late Intermediate Period in the area of Cerro Colorado. The rock art sites of the Northern Cluster are immediately upriver from these habitational areas and cemeteries and the distinctive, red slopes of Cerro Colorado (Fig. 8.6).

The hills around the Northern Cluster, especially those immediately to the west of the rock art sites, are lower than hills further upriver. This provides an open pass of low, rolling hills, which is the easiest route to take from the Nasca Valley to the Grande Valley. In fact, a modern dirt road made for vehicles to cross from one valley to the other (indicated in the topographic map) takes advantage of this natural pass and runs through the area directly west of the Northern Cluster sites. There are many pathways made for

[48] An informant to Proulx who volunteered some useful information regarding the importance of Cerro Colorado, claimed that even looters are somewhat afraid of this hill, and only the most experienced ones venture to work on or around this area.

travelers on foot that go through this area as well. Some of these pathways are particularly wide, indicating their frequent use. One pathway connects Sites 20 and 21 of the Northern Cluster, and then heads in the direction of the Grande Valley. Although it would be impossible to determine the antiquity of these paths, their connecting function is obvious. The pathways take advantage of this naturally occurring corridor between both valleys (Fig. 8.6).

More evidence of the ritual importance of the Northern Cluster comes in the form of geoglyphs. The sandy, rolling hills to the west of the Northern Cluster are also sites for some large and unusual geoglyphs, made by aligning river cobbles. One of these geoglyphs is a series of three sets of two concentric circles (Fig. 8.7).[49] The other one is a large cross shape. Smaller and more rough looking geoglyphs made by aligning river cobbles are also found in Section C of Quebrada Majuelos. The geoglyphs of the Northern Cluster, however, are not only larger but also more symmetrical.

Due to its location as a transitional location, the Northern Cluster was likely considered a liminal space or threshold. As people moved through this threshold, they also interacted with it, since the Northern Cluster sites possibly also served as places for liquid pouring offerings made by people in transit between these areas. These offerings will be described in the next section of this chapter.

[49] Tonya Panion (personal communication), a doctoral candidate in the Department of Anthropology at the University of Massachusetts at Amherst, also noted some concentric circle geoglyphs near Cerro Colorado made with aligned river cobbles.

Water and Nasca Valley Rock Art Site Locations

As mentioned above, the location of rock art sites in both Central Area and Northern Cluster suggest that rock art sites were likely thresholds between significant areas. The transition or boundary was celebrated through the carving of images on boulders and exposed rock strata. However, there is physical evidence of rituals that took place at these locations as well. This is evidenced in the high number of groove petroglyphs in the Northern Cluster. It is in the Northern Cluster that an additional transition was noted, which involves the availability of water. Liquid pouring appears to have take place at these points of passage.

Water Sources and the Archaeology of the Nasca Valley

The availability of water may have been a factor in the location of some sites such as ceremonial site of Cahuachi, in the Nasca Valley. Subsurface water seeps to the ground surface near this site and, although little, there tends to be some water there year round (Schreiber and Lancho Rojas 1988: 59; Silverman 1993: 10, 12-13).

Donald Proulx (1999) noted a couple of correspondences between site locations and water sources in his survey. First, he noted that confluences of rivers tended to be important site locations for Early and Late Intermediate Period sites (Proulx 1999: 51). Second, he noted that Nasca culture habitation areas in the Nasca Valley tended to be near places where subsurface water could reach the surface, locations that he called springs or *puquios*[50] and that would have had water year-round. These were the sites near

[50] Shreiber and Lancho (1988) did not include *puquios* so far downriver in the Nasca valley in their study of these structures.

Santa Clara, Agua Dulce (next to Cerro Colorado), and Los Colorados, in the lower portion of the Nasca Valley (Proulx 1999: 5).

Northern Cluster Sites as Water-Related Transitions

The form and location of the Northern Cluster indicate these sites were places of human meaning and interaction with the landscape. Specifically, these sites were ritual stops used in water related rituals, their location clearly associated to water sources.

There is a particularity to this portion of the Nasca River. It was observed in 1998 as well as in 2000 that even in the driest months of the year, underground water seeps to the surface of the riverbed near the confluence of this river and the Grande River, close to the site of Cerro Colorado (Fig. 8.5). Water starts seeping to the surface below the Northern Cluster, turning what in May and June should be a sandy riverbed into wet soil with considerably more vegetation than the riverbed further south. Proulx (1999) has further indicated that *puquios* exist in the area of the Northern Cluster, at Agua Dulce and Los Colorados. This is yet another indication of the water availability in this particular area.

It was mentioned in the previous section that the close proximity of sites in the Northern Cluster along with the similar types of petroglyphs used in these sites indicate that these were meant to be a group. The most prevalent petroglyph type in the Northern Cluster is the Group H groove or channel (Figs. 6.40-6.44).

Liquid pouring is evidenced in groove petroglyphs. Grooves, which can be relatively straight lines or zigzags, tend to be made on the inclined upper surfaces of rocks, although grooves on the vertical sides are also present on some boulders. In some

cases a groove continues from the top of a rock to the vertical side and down to the floor. This is the case, for example, of Rock 1 on Site 18 (Fig. 8.8) and Rock 2 of Site 16. A carved pit is present on the uppermost end of some grooves (Figs. 6.41 and 6.44). This suggests that these grooves may have served to direct liquid over the rock's surface. Water, or any other liquid, could be poured from a container onto the top of the rock, pool in the pit (when present) and overflow into the grooves, and then move down the inclined surface of the boulder. The form of these grooves is indicative of a liquid pouring activity taking place at these sites.

It is appropriate that liquid pouring takes place at a strategic point of the valley where water is available in some way even in the driest months. The proximity of two water sources, the Nasca and Grande Rivers, and the availability of surface water add to the importance of liquid, specifically water, to the groove petroglyphs.

The reemergence of subsurface water near the sites of the Northern Cluster may have been one of the significant characteristics that were involved in the selection of these sites for petroglyphs and liquid pouring rituals. The availability of surface water marks a considerable change in the landscape, a transition from dryness to wetness. Additionally, the *puquios*, if dated to ancient times, would have provided a more reliable source of water for this area. The sites are therefore marking the approximate spot where this change from dry to wet takes place. These sites are ultimately tied to local water sources,[51] which are likely to be the reason for these liquid pouring activities. The very

[51] Nothing conclusive could be gathered from the orientation of the rock art, although a slight preference was noted to the direction of the river. The orientations of the petroglyph covered sides of boulders and exposed rock strata showed no predominant

shape of grooves echo the sinuous course of a river. In the case of Rock 2 of Site 16, located on a steep hillside above a riverbed, one of the grooves continues from the top to the vertical side of the rock facing the river, as if the liquid were to end in the river itself. Symbolically and conceptually, this ties the liquid poured into the rock to the water in the river.

Grooves Outside of the Northern Cluster

There are other groove petroglyphs outside of the Northern Cluster, however. Although I do not intend to explain all of the survey area's petroglyphs in this dissertation, these deserve to be mentioned since they belong to the same style and were probably made at the same time as the Northern Cluster geoglyphs. These are located in Sites X15, RN51 (Fig. 8.9), and RN50. If water was significant for the making of the petroglyphs in the Northern Cluster, the same explanation should hold true at these site locations.

As it was mentioned above, Proulx documented the existence of *puquios* near the Northern Cluster. He also reported another *puquio* in the Santa Clara area, upriver but close to his Site RN4 (Proulx 1999). This would place the *puquio* between the entrances to the quebradas of petroglyph sites X15 and RN51.

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cardinal direction. Among the totality of rock art sites, there were higher numbers for South (18%), North (16%), and West (14%) orientations while 17% of boulders had petroglyphs on the upper portion, or top, of the rock. Additionally, 3% of boulders had rock art on all sides, therefore showing no true orientation. A trend was noted, however, among the petroglyphs sides that had a view of the Nasca River. There was a slight preference at these sites to make petroglyphs on the sides of the rocks that faced the rivers. Of the total number of engraved rock boulders in sites that had a river view, 59% were engraved on the side that faced the river.

Regarding Site RN50, there may be a similar transition from dry to wet near the Southern Cluster. As mentioned above, this portion of the Nasca River also had some surface water on the riverbed during my work at that area, during June of 2000, although the amount of water was considerably less than that of the Northern Cluster. Additionally, the Southern Cluster is located at the confluence of the Nasca River and the Quebrada Usaca. I cannot at this point explain why there are so many more groove petroglyphs in the Northern Cluster than in the Southern Cluster. It may be due to the traffic that these locations had during the time that the petroglyphs were made, or to the fact that the Grande Valley is a more fertile location with a greater abundance of water.

Grooves Outside the Grande River System

Stones with grooves like those found in the Northern Cluster sites have also been found elsewhere in the Andean area. Persis Clarkson also mentioned the existence of a rock outcrop covered with grooves and pits at the site of Wari (Clarkson 1990: 168-169). These were thought to have served to collect rainwater, but were in reality too small to have had any functional purpose. Although these examples are more elaborate than the Northern Cluster grooves, and rainwater collection would have been extremely unlikely in the Nasca area, it would be interesting to investigate the relationship between the rocks at Wari and water sources in order to define whether the same patterns developed in those areas.

Pacchas and other water pouring rituals

Although the location and form of these particular stones indicate their possible function and significance, it is important to point out that acts of liquid pouring are not

limited only to the South Coast. The practice, in fact, is widespread throughout the Andean area and has been documented in some colonial documents. In his 1653 account of Inca and contact period ritual practices, Father Bernabe Cobo discussed different types of sacred places as well as ritual offerings performed at those locations. Among the offerings made at sacred sites described by Cobo are acts of liquid pouring. In this case the liquid was specifically *chicha*, or corn beer, which was generously poured over altars and idols (Cobo 1990: 116). Evidence of liquid pouring activities in pre-Columbian times also comes in the form of objects that were used in these activities. These objects, called *pacchas* in Quechua, were containers that had a pouring hole or spout in the lower area of the vessel. Although mainly Inca and Chimu and Recuay, a few *pacchas* have been found in the south coast, including some that are clearly Nasca in style (See Carrion Cachot 1955: Lamina XIXa-c). Interestingly, some *pacchas* have an extension below the spout that serves to catch the liquid poured from the vessel. These extensions sometimes have an engraved zigzag that channels the liquid. Like the Northern Cluster grooves that begin with a circular pit, these *pacchas* also consist of a receptacle and a channel. Carrion Cachot (1955) has suggested that large stones with engraved grooves or channels, such as the one at the Inka site of Saywite (Department of Abancay) are larger *pacchas* since they also are tools used for liquid pouring rituals. The Saywite stone is not only covered with deep grooves or channels, but also displays other carvings such as terraces and animals done in relief.

The sites of the Northern Cluster were meaningful locales kept active through human interaction, which in this case took the form of liquid pouring rituals. Although

physical evidence of ritual activity is often difficult to find, these grooves present a rare opportunity to see the tangible remains of ritualized actions. The importance of water may have been the primary reason why these sites were selected for the making of groove petroglyphs and their subsequent use in pouring rituals. The water running through the grooves is symbolically associated to the river. However, the changes in the landscape around the Northern Cluster cannot have gone unnoticed to those who used these petroglyphs. The ritual action of liquid pouring is derived from the immediate environment and at the same time reinforces its importance.

The Andean Apacheta

The "betwixt and between" quality of rock art site locations, but specifically this quality in combination with the act of pouring an offering at Northern Cluster sites, is comparable to the Andean concept of the *apacheta* or *apachita*.[52] An *apacheta* is also a location for offerings. Although the word *apacheta* currently refers primarily to piles of stones, the term *apacheta* or *apachita* was used to a location, especially passes, hilltops and high places along a road (Cobo 1990: 256, 261). According to Father Bernabé Cobo, Andean people:

> ...worshipped at these places, saying that when they had finished climbing uphill and had reached the top, they rested after the climb. They had made large piles of stones at these *apachitas*, as well as at level places and crossings along the roads. They also did reverence to these places and made offerings (Cobo 1990: 45).

In his writings, the term *apachita* refers to the place, not the offering left at that location. The places that were considered worthy of offerings, according to Cobo, could be

[52] Both spellings are used in the writings of chroniclers as well as in other ethnographic studies.

described as "in between" places. These included the points where the traveler no longer was ascending, but had reached the top and would start to descend, although *apachetas* or *apachitas* could also include crossroads, significant transitional places. In Guaman Poma's writings, the term also refers to the location, rather than the offering.[53]

The types of offerings made at *apachetas* consisted primarily of stones, but could also include chewed coca leaves, maize, feathers, rope, and even sandals or eyelashes (Santa Cruz Pachacuti Yamqui 1993: 200; 1995: 23, 161; Cobo 1990: 116, 119). These offerings were primarily made to protect the travelers and keep them from being tired (Santa Cruz Pachacuti Yamqui 1995: 161; Cobo 1990: 116, 119). It was not uncommon to see piles of stones at mountain passes as evidence of the many travelers that have left their offerings at these locations (Cobo 1990: 254). In fact, today the word *apacheta* is often used to refer to the piles of stones (Bolin 1998: 74, 251), the offerings, as opposed to the places Cobo described. Like the Northern Cluster locations, what is left at these important sites of transition is the evidence of the offerings.

It is important to state that I am not arguing that the Northern Cluster petroglyph sites are *apachetas* per se, but that these sites, as transitional places where offerings were made, may have served a function comparable to the *apachetas* as described by Cobo. There are piles of stones or cairns elsewhere on this valley, some of which are near petroglyphs.[54] However, those piles of stones may be more closely related to the making

[53] "Mandó Topa Inga Yupangui que los indios de tierra caliente o los indios de la sierra fuesen a lo caliente, llegasen al apachita, en ello adorasen a Pacha cámac, y por señal amontonasen piedra, cada cual llevase una piedra y lo echasen en ella…" (Guaman Poma 1993: 1: 196).

[54] See Site X01, for example.

of geoglyphs called *campos aclarados* or *barridos*. On the other hand, liquid offerings made near a pass between two valleys, as a traveler left or entered the Nasca valley, is something comparable to Cobo's description of the *apacheta* offerings. The "betwixt and between" nature of the Northern Cluster (and Central Area?) as well as the location of these sites near the pass between the valleys supports this proposition. The interaction with place (the making of petroglyphs and the liquid pouring offerings), as Tilley would suggest, solidified the cultural importance of these places and spaces in this portion of the valley.

Conclusions

The fixed position of rock art allows us to speculate on its function in ways that are not possible with the objects available in museum collections, often lacking important contextual information. Based on documented remains, it was submitted here that rock art sites in the survey area constituted thresholds between meaningful spaces in the landscape. The function of rock art sites as liminal spaces that served as ritual stops is a complex issue. It was argued here that significant places in the local sacred landscape had liminal qualities. Rock art sites display this trait as well. Due to their location, these rock art sites could have been perceived as thresholds. Most importantly, people interacted with some of these thresholds in some cases by painting or carving figures and breaking pottery, in others through pouring rituals.

Rock art sites in the Northern Cluster in particular mark several types of transitions. One of them, the transition from dry to wet appears to be related to pouring rituals made on Groove petroglyphs. The rock art sites of the Central Area, however

were not necessarily used in the same way as the Northern Cluster sites. Aside from a few potsherds at the Central Area sites, there is no evidence of offerings being made at the Central Area sites, with three exceptions, sites X15, RN50, and RN5, all of which have groove petroglyphs. The rest of the sites located on the eastern side of the Central Area are iconographically complex, as described above. They show more petroglyph making activity than anywhere else on the valley, and this activity is likely to be associated to the *pampas* geoglyphs.

Still, other relationships need to be explored further. The Southern Cluster sites could indicate a transition as well, between the Nasca valley and Quebrada Usaca, or simply marking the border between the Nasca valley proper and the Nasca Pampa. These are very tentative propositions, however, as more work needs to be done in this portion of the survey. The idea that these sites are transitional locations needs more work at sites outside of the Nasca Valley as well. A topographic map of the area of Chichictara reveals that La Viuda and Chichictara flank what appears to be a pass between Palpa and Vizcas Valleys, but the accessibility of such a pass would need to be verified by foot. Additionally, the relationship of rock art and water sources is unclear for rock art sites outside of the Nasca Valley at this time.

As Christopher Tilley (1994) argued, the idea of space is a cultural and social construction, its meaningfulness maintained through human activity. Movement through space and interaction with specific, culturally significant, places reinforce the meaning of locales to those who use them. The continuous ritual activity at these rock art sites throughout the centuries attests to their lasting cultural importance. To these people in

transit, interaction seemed to build and reinforce ideas about the importance of sacred landscape features.

Figure 8.1: Cerro Blanco (photo: Ana Nieves)

Figure 8.2: Sand dunes on Cerro Blanco (photo: Ana Nieves)

Figure 8.3: Some pot sherds on Cerro Blanco's slopes (photo: Ana Nieves)

Figure 8.4: Diagram of liminal locations in the survey area. The Nasca Pampa constitute one liminal location (L1). The rock art sites within the *quebradas* on the eastern side of the Nasca Valley (L2) are liminal locations between the valley and the *pampas*.

Figure 8.5: Lower Nasca Valley. Cerro Colorado is on the right (photo: Ana Nieves)

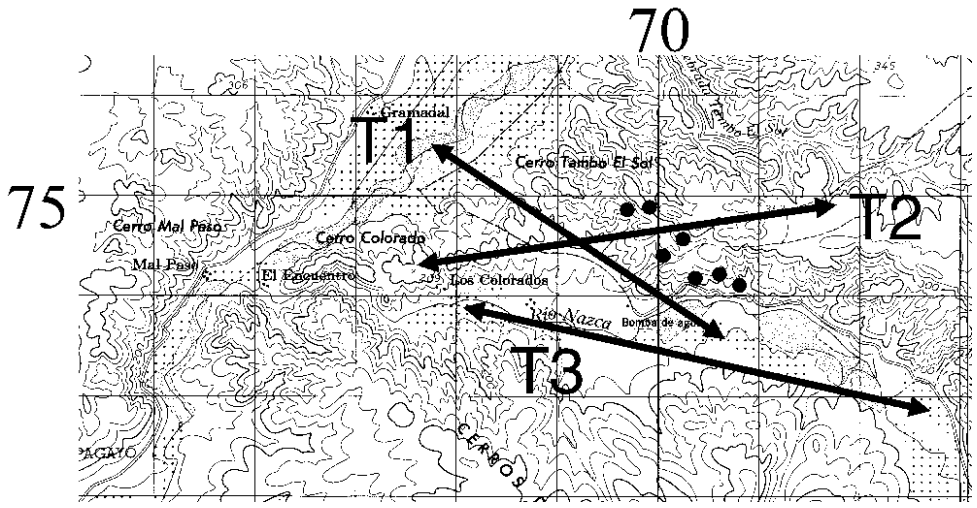


Figure 8.6: Map indicating the three transitions that take place around the Northern Cluster sites: T1 is the transition between valleys, T2 the transition from Cerro Colorado to the Nasca Pampa or the rest of the Nasca Valley, and T3 is the transition from having no surface water on the Nasca Valley to the availability of surface water downriver.

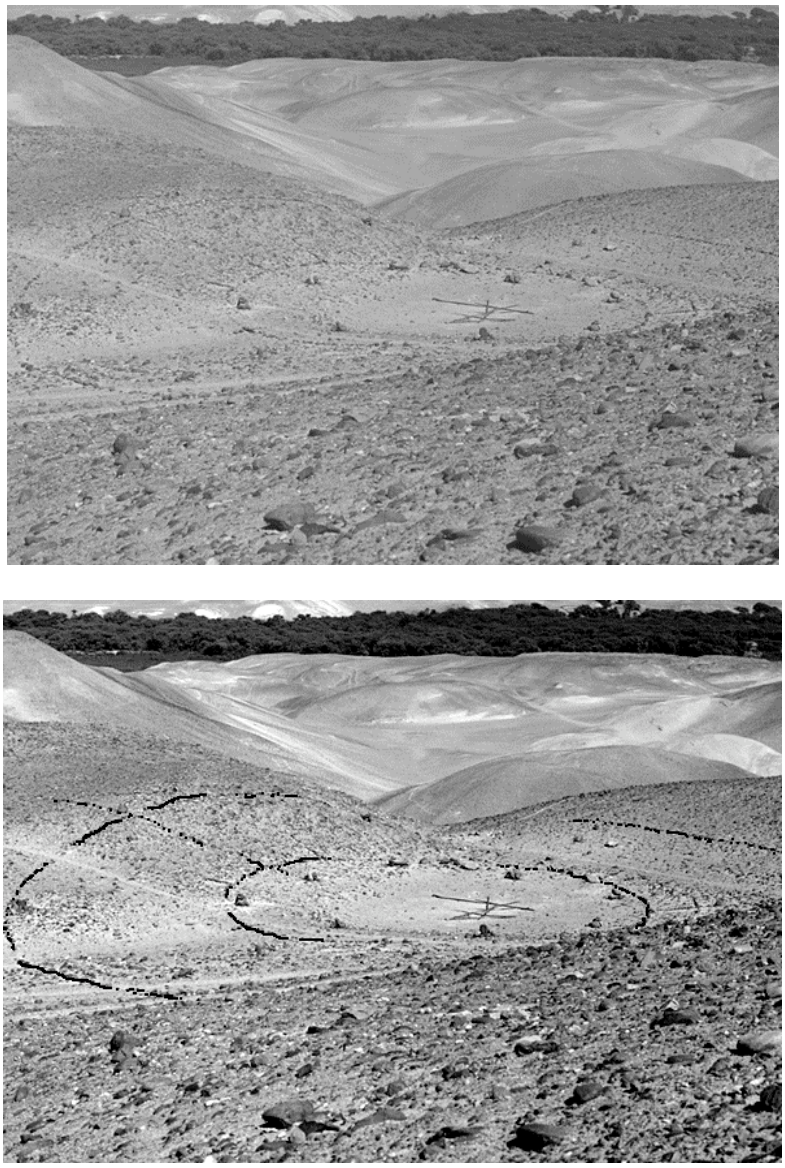


Figure 8.7: Geoglyph near the Northern Cluster (photo: Ana Nieves)

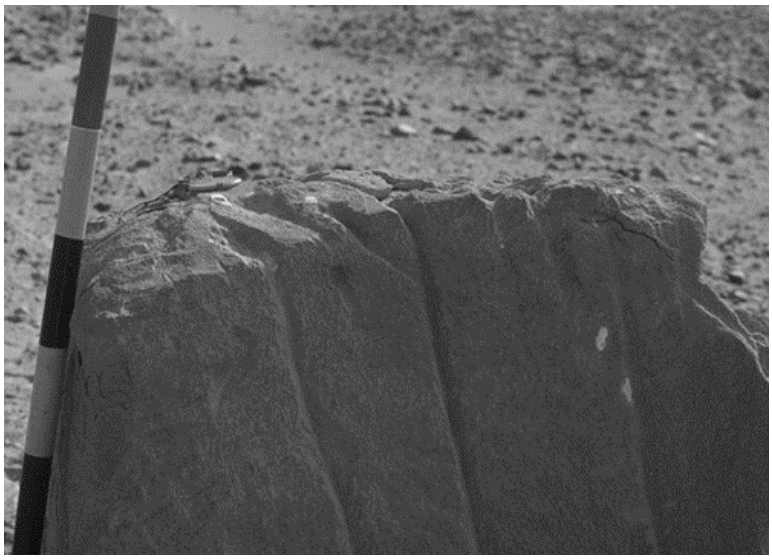


Figure 8.8: Site X18, Rock 1 (photo: Ana Nieves)

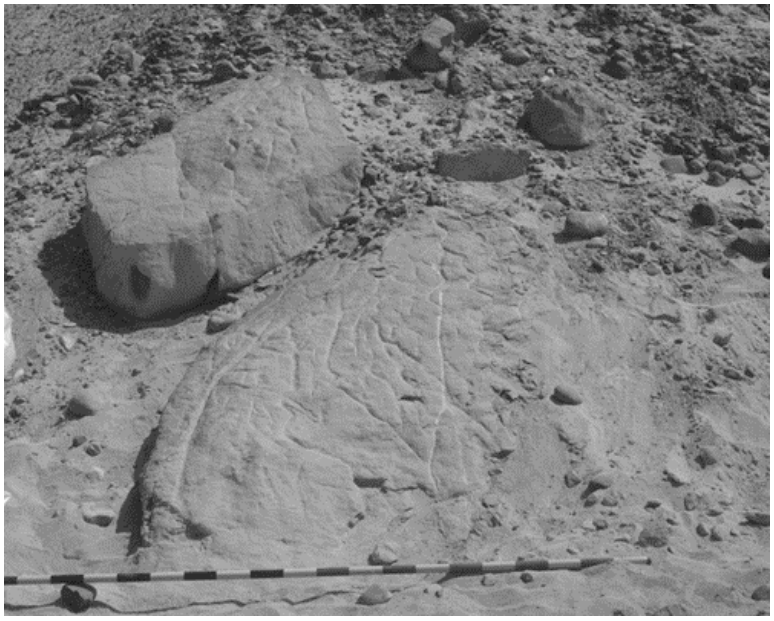


Figure 8.9: Site RN51, Rocks G and H. Both have Group H groove petroglyphs (photo: Ana Nieves)

CHAPTER 9 : OCEAN ICONOGRAPHY AND NASCA VALLEY ROCK ART

One of the biggest challenges in the study of Nasca culture iconography is that the greatest amount of material on which to base interpretations consists of ceramics that lack any kind of contextual information. There have been multiple methodologies applied to this material that compensate for this lack. In this chapter I examine one Nasca iconographic motif, the Nasca Mythical Killer Whale. Based on the motif's traits, I propose using a different, less specific, name for this same creature: the Nasca Aquatic Composite Being. This motif is most often found in Nasca ceramics, but has its roots in Paracas textiles and ceramics. It is also depicted in two rock art sites in the Nasca Valley (Fig. 9.1). I here examine the location of this motif in the rock art of this valley, as well as the associated material at the sites and the way in which the motif is depicted, in order to complicate the meaning of this mythical figure. In the Andean region, the iconography of rock art is usually explained based on comparisons to other arts such as ceramics or textiles. In this case, I invert this process and argue that these petroglyphs' contextual information can shed light on this motif when it is depicted in other mediums. In other words, the rock art, due to its fixed position can provide valuable information for the iconographic analysis of portable objects with shared subject matter.

A concern for the water of the ocean can be observed in the choice of marine animals as a subject matter in early Nasca art, even as far inland as the Nasca Valley which is over 30 km from the coast. The main marine animal in Nasca art, the Mythical

Killer Whale (Fig. 6.36), has been the subject of much speculation regarding the importance of this figure to Nasca society. Was this a deity? Does its appearance reflect a particular dependence on marine resources? What was its relation to other Nasca mythical creatures?

The art of the Paracas and Nasca civilizations demonstrates a concern with agricultural abundance. Plants and fruits in and of themselves are worthy of depiction in the finest of Nasca ceramics, while mythical figures of Paracas embroideries or Nasca slip-painted pottery are usually associated with vegetation. Anthropomorphs are sometimes shown with attached fruits, beans, and other plants (Peters 1991). In Paracas Topará ceramics many vessels are modeled into very naturalistic gourd shapes. This concern with agriculture is even more evident in early Nasca art, where fruits and vegetables become a prevalent theme in Nasca iconography. Mythical creatures shown on the art of Nasca 3-5 sprout plants or carry plant-sprouting trophy heads. The Nasca Harvester, a plant-wielding figure with trophy head characteristics, is an important iconographic motif during phase 5. In all of these phases of Nasca art the themes of death, plants, and fertility intertwine. The Nasca Mythical Killer Whale motif and other marine references have also been interpreted as related to fertility and agricultural abundance. The Nasca made an obvious connection between the Mythical Killer Whale and trophy heads. Trophy heads in Nasca iconography are often shown with plants or are even shown sprouting them, a clear connection to agriculture. However, naturalistic plants, vegetables, or fruits are rarely shown alongside the Nasca Mythical Killer Whale. The only connection between this figure and agricultural abundance is indirect, through

the representation of the trophy head. This chapter examines the figure's iconography and elaborates on and complicates its meaning through the analysis of rock art representations of this motif.

Nasca Mythical Killer Whale Description and Identification

The name of the motif clearly identifies this figure as a particular marine animal. However, there have been some conflicting interpretations of what animal(s) this figure represents. The Nasca Mythical Killer Whale could in fact conflate traits of two or more creatures.

Yacovleff's (1932) influential article on this Nasca motif first identified this figure as an orca (*Orcinus orca*) based on the shape of its body. Orcas live in the cold waters of the Pacific Ocean as far north as the Paracas peninsula (Peters 1991). After Yacovleffs's publication many scholars identified this figure as an orca or killer whale (for example: Carmichael 1990; Reindel, Isla and Koschmieder 1999; Reindel and Isla 1999; Silverman and Proulx 2002; Proulx 2006).

Townsend (1985: 133) did not commit to a single identification for this being. Instead, he referred to this being as a composite fish-like creature. He pointed out that this figure actually incorporates shark and orca elements. According to Peters (1991), in the art of the Paracas and Nasca, this type of figure combines the traits of sea lions, killer whales, sharks, and snake mackerels, and additionally could also represent the whale shark (*Rhincodon typus*), a black and white shark that also has a blunt snout but is not as dangerous as the orca.

Perhaps the earliest depictions of orcas or killer whales (*Orcinius orca*) in the art of south coast cultures are found during Paracas Ocucaje Phase 10 (Menzel, Rowe, and Dawson 1964: 248-249). In Paracas resin-painted pottery, the orca or killer whale "is distinguished by an elaborately arching body with two fin projections at the top and two at the bottom, a saw-toothed mouth, a widely flaring, concave-sided tail, and a 'hand' in front like hands of humans or of the Oculate Being" (Menzel, Rowe, and Dawson 1964: 249).

In one study of Paracas embroideries, Mary Frame stated that in Paracas art,

> …the distinction between sharks and killer whales is often blurred, or perhaps purposefully generalized. Both are fierce predators of the ocean and share traits of fins, tail, and prominent teeth. (Frame 2001: 77)

She added that sometimes specific traits in these embroidered representations identify one animal and not the other. Gills represent only sharks, for example. The blending of dfferent sea creatures has precedents in Paracas art.

Silverman and Proulx describe the history of the Nasca Mythical Killer Whale motif, especially in ceramic representations:

> The Mythical Killer Whale, representing the most powerful creature of the sea, nevertheless appears to be of second importance to the AMB [or Anthropomorphic Mythical Being, the most often depicted mythical being]. Like the AMB, it has its origins in Paracas art. The creature is depicted naturalistically in Nasca 1 with the exception of the human arm extending from its ventral side. Soon, however, Mythical Killer Whales are depicted holding knives or human trophy heads in their anthropomorphized hands; this association with trophy heads and blood continues through the entire ceramic sequence. In Nasca 5 radical changes take place in the depiction of some Mythical Killer Whales. An abbreviated form appears, representing a frontal view of the creature's head characterized by open jaws and a patch of blood (symbolizing a trophy head). Roark coined the term "Bloody Mouth" for this variant form. The Bloody Mouth is most prevalent in Nasca 5 but continues into Nasca 6; in Nasca 7 and 8 it is replaced by a profile form with a jagged-toothed jaw. In the meantime, Killer

> Whale attributes are attached to the AMB in the form of signifiers which terminate in the form of a killer whale tail. (Silverman and Proulx 2002: 141-142)

In early Nasca representations of this creature its body is depicted in a more naturalistic manner. Later Nasca versions of this figure also display the human arm and sometimes hold trophy heads. Both Mythical Killer Whales and Bloody Mouth motifs are also depicted on the painted or tattooed bodies of nude female figures that date to Nasca phase 5.

Proulx has classified the various types of Mythical Killer Whales in Nasca art. KW-1 is a naturalistic killer whale with a human arm. KW-2 is basically the same as KW-1 but holds a knife or head. KW-3 is the abbreviated version of the Mythical Killer Whale known as the Bloody Mouth (Fig. 9.2). KW-4 is an anthropomorphized variety of the Mythical Killer Whale, with an extended body. KW-5 is a late Nasca fan headed Mythical Killer Whale. KW-6 is a later Nasca Mythical Killer Whale with wings. KW-7 is a category for killer whales figures that do not fit into the abovementioned groups. KW-8 is an effigy Mythical Killer Whale, a sculptural version of KW-2 (Fig. 9.3). KW-9 is a Nasca 7 Mythical Killer Whale head. KW-10 is another type of abbreviated Mythical Killer Whale consisting only of a band of fins (Fig. 9.4).

In the long history of the Nasca Mythical Killer Whale motif, this figure consistently combines shark, orca, and human traits, at the very least. Further associations link this figure to trophy heads and blood.

Orca and Shark Characteristics

There is no doubt that the Nasca Mythical Killer Whale is a composite creature. Considering the main sources for the Mythical Killer Whale figure type, the orca and the shark, it is important to consider the physical characteristics and observable behavior associated with these two marine animals.

Killer whales belong to the dolphin or Delphinidae family. They are easily recognized by their distinct black and white coloring, large dorsal fin, and a clear white oval spot behind their eyes. A male can be as big as 9 meters in length (National Audubon Society 2002: 437). Like other members of the dolphin family, "their teeth are homodont, meaning that all the teeth in a dolphin's jaw are alike in structure. The pointy teeth are designed for grasping individual prey items, rather than for chewing…." (Grzimek 2003: 15: 42). Killer whales "have about 50 large teeth for capturing large fish and removing large pieces from a variety of marine mammals" (Grzimek 2003: 15: 42). For breathing purposes, killer whales have a blowhole on their heads and therefore must have access to the surface of the water (Grzimek 2003: 15: 42). In fact, these animals interact with the water's surface regularly, often slapping the surface with their flippers or spy hopping (National Audubon Society 2002: 438). Often compared to foxes in their hunting habits, orcas often hunt in groups (National Audubon Society 2002: 439). They are often found near shorelines, where they "slide into beaches to capture pinnipeds" (Grzimek 2003: 15: 44). When eating large animals, killer whales cooperate with each other, often holding the prey while another killer whale feeds on it (Grzimek 2003: 15: 47).

As mentioned above, the Nasca Mythical Killer whale and its Paracas predecessors can display shark traits as well. Although no gills are depicted on Nasca ceramic examples, the triangular teeth and fins certainly resemble those of sharks. There are many sharks observed off the coast of South America but unfortunately the Nasca Mythical Killer Whale does not have characteristics that are specific enough to identify the creature as one particular type of shark. This may be purposeful as many sharks resemble each other if seen from a distance. I here elaborate on some of the sharks reported off of the coast of South America. I excluded any hammerhead sharks due to their distinctive head type, as I have not observed this head shape on the Mythical Killer Whale.

Some Carcharhiniformes or Ground Sharks have been observed off the coast of South America, such as the Lemon shark (*Negaprion breviosris*), Bull shark (*Carcharhinus leucas*), Oceanic Whitetip shark (*Carcharhinus longimanus*), Tiger shark (*Galeocerdo cuvier*), and Blue shark (*Prionace glauca*). The Lemon shark is not dangerous, but it is quite large. The rest of these sharks are quite aggressive and there are some documented attacks on fishermen and divers by sharks of these species (Grzimec 2004: 4: 121-123). The Blue shark has the unusual trait of circling its victims before it attacks (Grzimec 2003: 4: 124). Another shark from this family is the Galapagos shark (*Carcharhinus galapagensis*), also known as Tollo, which takes its name from the Galapagos islands. It has triangular, serrated teeth.

Among the Lamniformes or Mackerel sharks that live off the South American coast are the Thresher shark (*Alopias vulpinus*), White shark (*Carcharodon carcharias*),

Shortfin mako *(Isurus oxyrinchus*), Basking shark (*Cetorhinus maximus*). These tend to be large (up to 15 meters long). All have two dorsal fins, the first being larger than the second. They tend to live in shallow coastal areas and some will leap out of the water. As far as feeding is concerned, they feed on everything from invertebrates to birds and marine mammals (Grzimek 2003: 4: 131-133). Of these sharks, the White shark displays behaviors that parallel those of dolphins. This shark also leaps out of the water and spy hops (this behavior involves raising its head above water to observe its surroundings). Orcas and White sharks therefore have shared traits that are observable. There is another connection between both of these animals. "White sharks are one of the top predators of the ocean; however, they sometimes fall prey to orcas" (Grzimek 2003: 4: 137).

Clearly both orcas and the aforementioned sharks exhibit predatory behavior and demonstrate aggressive qualities. Orcas and White sharks also display liminal characteristics, as they transcend the water. They slide onto the shore or leap out of the water. Often, this very behavior is exhibited while in the process of hunting. This observed predatory behavior, plus the shared physical qualities (large bodies, triangular fins), may have been enough for the Nasca and the Paracas before them to conflate traits of both animals into a single entity.

The Aquatic Composite Being: A Reevaluation of the Nasca Mythical Killer Whale Motif

Due to the composite nature of this creature, using the name Mythical Killer Whale may be misleading and confusing. I concur with Townsend (1985) in stating that this is a composite being that resembles fish. I do not doubt that there are orca elements in some representations but the creature contains much more than just orca

characteristics. I propose using the term Aquatic Composite Being instead of the more commonly used (and species-specific) Mythical Killer Whale. Aquatic Composite Being is a name that stresses its composite nature and its identification with water. I tried to avoid identifying it as specifically maritime as a way of acknowledging Carmichael's (1990) proposition that this animal may refer to water in general and not to the sepecific location of the ocean or its resources. It is a term broad enough to emcompass most previous hypotheses regarding its identification and meaning.

The Nasca Aquatic Composite Being incorporates traits of orca and shark. In fact, the main part of the figure, its body, is that of a marine animal. It usually has two dorsal fins more or less of equal size and does not display the orca's large dorsal fin or blowhole that would identify it as this as belonging to this species. The Aquatic Composite Being's body is often divided into two colors, a visual parallel to the black and white coloring of the orca, however. This figure also can display a spot by the eye, much like the orcas, although not all representations of the Aquatic Composite Being have this trait. Although the figure also dislays some shark traits, like triangular teeth and triangular fins, it also lacks the depiction of gills.

In order for this figure to be a composite it should incorporate at least one secondary trait from a terrestrial creature. The most often depicted secondary trait is the human arm. However, it could also have a mammalian ear. Additional traits include the following: a curl under its chin, at least one band along its body, a fox-shaped head, and it can hold a knife or trophy head in its hand.

There are a few exceptions to the description above. Proulx's KW-4 type is decribed as an Anthropomorphic Mythical Killer Whale (Proulx 2006: 85). This figure seems to be a combination of the Aquatic Composite Being and the more often depicted Anthropomorphic Mythical Being. It may have a marine animal streamer or head in combination with a human body. The abbreviated versions of the Aquatic Composite Being would also be exceptions to the description above. These would include the Bloody Mouth motif (Proulx's KW-3) and the fan-headed motif (Proulx's KW-5).

Iconographic Interpretations of the Aquatic Composite Being

Regarding the significance of the Aquatic Composite Being in Nasca ceramics, a number of possibilities have been suggested. Due to its association to predators and to trophy heads, a symbol of power in Nasca art, Townsend stated that this figure "carried messages of power and hierarchies, the control of territory, and the ability or function of taking life; it may also have conveyed notions of protection or warning to invaders who might trespass on Nasca domain" (Townsend 1985: 133).

Lyon, who did not believe that this figure actually represented an orca, argued that this figure could represent the concept of the Master or Mistress of the Fishes, a "supernatural being who has in its charge all water creatures and who is in a position to provide rich fishing to those who please it and destroy those who do not" (Lyon 1978: 126). This interpretation would reflect an obvious concern with marine resources and fishing in general. However, its association to specific myths and concepts is problematic when applied to such an ancient civilization.

According to Carmichael (1990), the fact that the Aquatic Composite Being is mainly a marine creature does not automatically indicate a secular concern such as the abundance of marine resources for fishing. Carmichael, who believed all Nasca iconography to be symbolic, argued that this figure primarily refers to water and fertility in general, and that it is associated to other Nasca mythical creatures in a type of "continuum expressing agricultural fertility concepts" (Carmichael 1990: 190). In this continuum, Carmichael argued that the Aquatic Composite Being would be but one of many figures that relate to agriculture, in this case through its association to the greatest body of water, the ocean. He used post-contact sources to argue that as a general rule in Andean thought, conceptually, all waters were considered one and the same since the ocean is perceived in Andean mythology as the mother of all waters. Precipitation and all bodies of water were therefore equated. In the highlands, for example, offerings of *mullu* and other seashells are given to springs and other water-related *huacas*. Carmichael therefore sees no discrepancy between the use of marine iconography in relation to agriculture.

Of particular importance is the association of this particular motif to female iconography. In her study of Nasca female figurines that date from the mid to late Nasca phases, Morgan (1988) noted that motifs that were painted on the bodies of these nude female figures usually had fertility and marine associations. Some of these painted motifs were shown directing attention to the figurine's genitals. The Aquatic Composite Being was usually painted on the buttocks of these figurines. Morgan argues that these

figurines served as offerings for a marine deity that was invoked for fertility, fishing, and protection.

One association that has not yet been made in the literature, but that seems to me to be intriguing, is between Nasca depictions of the Aquatic Composite Being and a contemporaneous Moche example of a marine animal that also has an extended human arm that holds a knife. Bourget (1994) identified this animal as a *pez borracho*, which is similar to the Tramboyo fish (*Auchenionchus microcirrhis*). According to Bourget, Moche depictions of the fish emphasize its head, which is depicted as a fox's head. He believes this emphasis on the head and the knife firmly associates this fish to decapitation. He notes that the head of the fish is consumed as a soup for its physical effects, which include drowsiness and vivid dreams (the name of the fish literally means "drunk fish"). Although there is no direct evidence that links the Nasca Aquatic Composite Being with the Moche *pez borracho*, the similarities between them include the marine animal body, human arm, and knife. One could argue that the head of the Nasca Mythical Killer Whale or Aquatic Composite Being also shares characteristics with depictions of foxes (the squared snout and display of teeth, but also the arching of the back). However, I am not aware of the *pez borracho* fish having the same importance or meaning this far south.

Aquatic Composite Being Petroglyphs

Direct references to the water of the ocean can be found in the depictions of five marine animals among the Nasca valley petroglyphs. Three of these petroglyphs clearly depict the Nasca Aquatic Composite Being. Petroglyphs of marine animals can be found

in two sites in the Central Area, both of which are on the eastern side of the Nasca valley: sites X02 and QMA01 (or Proulx's RN49). At site QMA01, the Aquatic Composite Being takes on monumental proportions, compared to the smaller versions of this same motif in Site X02.

At QMA01 there is a Aquatic Composite Being (Feature A) made with deeply carved outlines on Panel F (Fig. 6.31), and a smaller lightly incised Aquatic Composite Being (Feature B) between the larger figure's fins (6.32). An additional marine animal is also made with deeply carved outlines on Panel E (Fig. 6.34). The Panel E figure has large triangular fins, a banded body and either part of a human arm or a long, narrow fin below the head. The body of this figure resembles a shark. Its large round eye, upturned and banded body, and triangular fins, as well as the technique used in its execution (deeply carved lines) related this figure to Feature A in Panel F.

At Site X02, one definite depiction of the Aquatic Composite Being is Feature Q on Rock 4 (Fig. 6.33) while a more simplified version labeled Feature 1Y is located on the upper central portion of Rock 1 (Fig. 6.35).

The formal characteristics of the QMA01 petroglyphs make them undoubtedly Nasca Aquatic Composite Beings. The figures display a mammalian ear on top of the head, which is also a trait of Nasca ceramic depictions of this creature. To use Proulx's (2006) classification, the QMA01 Aquatic Composite Beings are of the KW-1 type, which means they have a human arm but do not hold a knife or human head in their hand.

In all petroglyphs of the Aquatic Composite Being, its body is curved upward. In two cases, the figure clearly displays a human arm. In all of the petroglyph examples,

triangular fins are depicted on the upper and lower portion of the body. Triangular teeth are clearly indicated in the example shown on Rock 4 of Site X02. The blunt snout characteristic of many Nasca Aquatic Composite Beings is shown on three of the four examples. Furthermore, a curl is clearly shown on the bottom of the head in the QMA01 Panel F figure, a trait that also appears in Nasca 3 and 4 Aquatic Composite Beings (Proulx 1968: 35, 46, 87).

Feature 1Y on X02's Rock 1 also resembles a Aquatic Composite Being. It faces right and also has triangular fins. The mouth, however, does not display any teeth and the tail portion of the body is not visible. It may have a mammalian ear. The lower fin is long and is therefore almost arm-like. This is the only example of a Aquatic Composite Being petroglyph in the Nasca Valley that does not have stylistic traits that would definitely identify this as belonging to the Nasca culture.

At Site X02 there is a relationship between marine animals and female iconography. Both examples of marine animals are shown on the same boulders as vulva designs. Site X02 in fact presents an interesting problem in chronology, since the Aquatic Composite Being is on boulders that have clear Paracas iconography and also have vulva designs as well. In the art of South Coast cultures, vulva designs are not normally represented until Nasca 5. The Aquatic Composite Being on Rock 4 is clearly Nasca, but the one on Rock 1 may be a bit earlier and could be Paracas as well due to the associated motifs.

The relationship of the Aquatic Composite Being petroglyphs to the geoglyphs in the Nasca Pampa is evident in the location of these petroglyphs, on the eastern side of the

valley (the side that borders the Nasca Pampa). There are at least five geoglyphs depicting marine animals in the Grande River system, in the Nasca Pampa and in the Palpa Valley, and two of these are clearly Nasca Aquatic Composite Beings. In some cases their bodies are decorated with parallel bands, as are the QMA01 petroglyph examples.

Aquatic Composite Being Geoglyphs

There are several geoglyphs representing marine animals in the Grande River System. Three marine animal geoglyphs are on the Nasca Pampa, by the Ingenio Valley. One more, apparently a whale, is 6 kilometers northwest of the town of Nasca (Reiche 1993: 464). Still another, highly stylized, possible Aquatic Composite Being is in the Palpa Valley, on the Cresta de Sacramento (Reindel, Isla, and Koschmieder 1999).

The examples on the Nasca Pampa are probably the closest to the Aquatic Composite Being motif in Nasca ceramics. The best known geoglyph faces the left (Fig. 6.37b) and is one of the classical Nasca geoglyphs made with a single, uninterrupted line. The figure has triangular fins, a tail that curves upwards and bifurcates, and a banded body. It also has an extended arm that holds a round object. In ceramic versions of this motif this shape would be a decapitated head or a knife. These belong to Proulx's (2006) KW-2 type. This Aquatic Composite Being is on the northern portion of the *pampa,* on the southern side of the Ingenio Valley, and east of the Panamerican highway.

The second clear representation of the Nasca Aquatic Composite Being on the Nasca Pampa is further west (Fig. 6.37a), but also on the northern portion of the *pampa*. This geoglyph is also a classical Nasca style, with the uninterrupted line creating the form

of the animal. Its tail also curves upwards, this time in a sharp angle, and the tail is bifurcated. The body is also banded and the animal also has an extended hand holding an object which could again be a head or a knife.

The third marine animal on the Nasca Pampa (Fig. 6.37c) is close to this last Aquatic Composite Being, less than 1 km apart. The figure is also made with a continuous line and has a banded body, but it lacks any traits that could relate this figure to the Aquatic Composite Being motif. It may simply represent a stylized fish.

Another marine animal is depicted 6 kilometers northwest of the town of Nasca (Fig. 9.5), but it also lacks traits that would clearly identify this as a Nasca Aquatic Composite Being It could represent a whale but it may also be a stylized fish.

The last example of a marine animal is from the Cresta de Sacramento in Palpa (Fig. 9.6). This particular example is also made with a continuous line, but is considerably more angular. It may simply be a stylized version of the Aquatic Composite Being, although it lacks an arm. Instead of straight, parallel bands along the length of the body, the lines within this figure's body echo the overall shape of the animal and zigzag at sharp angles.

It is impossible to demonstrate that any of these geoglyphs are exactly contemporaneous with each other, and much less that the geoglyphs are contemporaneous with any of the petroglyphs. If one would compare them formally, there are enough differences between all of these geoglyphs that one could never argue that they were made by the same hand. However, two of the Nasca Pampa geoglyphs share enough similarities that one can at least identify both as clearly representing the same figure type,

the Aquatic Composite Being. In both of those geoglyphs the bodies have parallel bands, they both have an extended arm holding an object, triangular fins, and both have bifurcated tails that curve upwards. These same traits are shared by Features A and B on QMA01's Panel F. They are also present on Feature Q on Site X02's Rock 4. Some of those characteristics are also present in the Panel E figure at QMA01. Where as on the petroglyphs the Aquatic Composite Being has an extended arm but does not hold a head or a knife, it is interesting to see that on the *pampa* the Aquatic Composite Being does hold the head or knife clearly.

Shark Fossils in Quebrada Majuelos

A characteristic of the area in which the marine animal petroglyphs are located is the abundance of fossils. Although primarily fossils of bivalves, one also finds triangular shark teeth in perfect condition and in large quantities. These can be found on the plateaus above the area of Quebrada Majuelos, within walking distance to Site QMA01, and especially in the area where branches A and B of Quebrada Majuelos meet (Fig. 9.7 and Appendix B). I did not encounter fossils of shark teeth on the southwest side of the Nasca Valley during my survey of this area.

Sharks fall under the Chondrichthyes class of fish, which also includes skates and rays.

> In the Chondrichthyes, bone is utterly absent. The internal skeleton is purely cartilaginous. These cartilages are, in many cases, calcified, but they never show true bone structure… It will be noted that this condition renders the study of chondrichthyan history a difficult matter. Throughout the geological range of the group, finds of isolated teeth and spines are not uncommon; but unless these are similar to types found in modern forms, it is difficult, sometimes impossible, to deduce the nature of the animal which bore them. (Romer 1966: 37)

The Quebrada Majuelos shark teeth fossils (Figs. 9.8 and 9.9) are similar in shape to those of known modern sharks. The fossilized teeth found here are between 2 and 6 cm high. Some seem to be upper teeth and are mostly broadly triangular, and serrated. Others look like lower teeth and are narrow, triangular, symmetrical and finely serrated. These shark teeth fossils share morphological traits with the teeth of the current White Shark or Carcharodon (Fig. 9.10). Some of the teeth I observed in the area also share similarities with the Galapagos shark's teeth (Fig. 9.11). A fisherman used to seeing these fishes would be able to easily identify the Quebrada Majuelos fossils as shark teeth. Orca teeth are considerably different (long, conical and not serrated) and shark teeth cannot be confused with these. These shark teeth fossils can be found on the edges of the Nasca Pampa, around Quebrada Majuelos, although concentrations of bivalve fossils are found elsewhere in the Nasca Valley.

It is important to mention that the only indication that the Nasca people were aware of these shark teeth fossils is the presence of Nasca ceramic sherds near concentrations of such fossils as well as their location within Quebrada Majuelos (and in close proximity of QMA01 petroglyphs). To my knowledge there are no Nasca objects made with shark teeth fossils and they are not found archaeologically in tombs or structures.

Location and Meaning of the Aquatic Composite Being Petroglyphs

The location of the Nasca Aquatic Composite Being motif within this landscape sheds light on the motif in a more general way. Rock art, both geolyphs and petroglyphs, are tied to their location and are in their original context. When the same motif is

depicted on ceramics or textiles, the associations that are present on the rock art examples should still hold true. There are a few conclusions that can be derived from the rock art versions of the Nasca Aquatic Composite Being.

First, the Nasca Aquatic Composite Being is clearly associated to rock art of the *pampas*. The petroglyph sites with this motif are located in the Nasca Valley between the river valley and the Nasca Pampa. The two clear geoglyphs of the Aquatic Composite Being are on the Nasca Pampa. Straight lines through the Nasca Pampa connect the Aquatic Composite Being geoglyphs on the Ingenio Valley (north) side of the Nasca Pampa to the *quebradas* of the Nasca Valley (Fig. 9.12). It is signficant that the Anthropomorphic Mythical Being, the most often depicted mythical being in Nasca ceramics, is not included among the geoglyphs or petroglyphs of the Grande River System. This indicates a greater concern with the figure of the Aquatic Composite Being with the area's rock art in general and with the spaces around the *pampas* in particular.

Second, the fossils also link the edges of the *pampas* with the ocean. Shell fossils are abundant in the *quebradas* of the Nasca Valley. Concentrations of shark teeth fossils in Quebrada Majuelos and the edges of the Nasca Pampa are clear physical evidence of these predators in this area. The Nasca could have perceived the presence of sharks at that location as evidence of a distant past, like we do, or of a supernatural present. Either way, the ocean associations of the fossils in these dry *quebradas* not only evoked the idea of the ocean, it also made it physically present and tangible, even this far inland.

As stated earlier in this chapter, given its incorporation of various animal and human traits, the Aquatic Composite Being is not a specific, identifiable animal. It

undeniably has killer whale or orca attributes but the human and shark elements that are incorporated into its body are equally important. The placement of the petroglyphs representing Aquatic Composite Beings in the *quebradas* on the northeast side of the valley is significant. The shark teeth fossils that are abundant in those areas could not have gone unnoticed, especially since many of these fossils were found inside Quebrada Majuelos, on hilltops that had views of the geoglyphs on the base of this *quebrada*. Ceramic sherd scatters were often found near some concentrations of shark teeth fossils. Ceramic depictions of the Aquatic Composite Being emphasize the triangular shape of the figure's teeth. In fact, when the figure gets reduced in Nasca 5 to the Bloody Mouth Motif (Proulx's type KW-3), the focus of the figure is exclusively on the jaws, gums, and triangular teeth. I argue that the triangular shape of these teeth is meant to replicate the shape of shark (not killer whale) teeth. Late examples of disembodied killer whale heads, labeled KW-9 by Proulx, also emphasize the triangular shape of the creature's teeth. The location of the Aquatic Composite Being petroglyphs and petroglyphs representing other marine animals, possible sharks, is consistent with the distribution of shark teeth fossils in this valley. Both are concentrated on the eastern side of the Nasca Valley. This is an important link between the iconography and the location, as these motifs are only in the eastern side of the Nasca Valley and other rock art sites in the Grande River System do not have representations of marine animals.

There is a discrepancy between this view and Carmichael's interpretation of the Aquatic Composite Being as symbolic of all water and agricultural abundance. There is no real visual link between this creature and fresh water at all (water that helps and not

hinders the growth of plants). It is the predatory nature of this ocean creature that is emphasized in the iconography: the blood, the heads, and the knife. As predators, the shark and the orca are shown as bloody creatures of the sea and the edge of the Nasca Pampa may have also been perceived as part of the sea. At the same time, due to the important role of trophy heads and decapitation in Nasca religion, the figure is undoubtedly related to rituals and possibly the myths that are associated to such rituals.

The location of the two clear Aquatic Composite Being geoglyphs is also very interesting. They are on the opposite side of the Nasca Pampa as the petroglyphs representing the same motif. However, they also are located on the edges of the Nasca Pampa. In their case, they mark the border of the pampas and the Ingenio Valley. As stated earlier, straight lines cross the Nasca Pampa connecting both geoglyphs and petroglyphs (Fig. 9.12). It is significant that no geoglyphs representing this motif are found deep inside the *pampas*. Instead, petroglyph and geoglyph reprentations of this motif mark the edeges or borders of the *pampas*.

There is a major difference between the Aquatic Composite Being on the Nasca Pampa and the representations on the Nasca Valley petroglyphs. The Nasca Pampa examples carry an object in their hands, either a head or a knife. The petroglyph examples do not. However, there are other indications of death and blood in the Nasca Valley Aquatic Composite Being petroglyphs. The examples from QMA01 are made on a exposed sandstone stratum with a reddish surface (Fig. 9.13). There is evidence of red pigment that had been added to the surface of this exposed stratum. Red drips (Fig. 9.14) are clearly seen in Panel C and a stone with ground red pigment (Fig. 9.15) was also

found in QMA01. Although some of the sandstone in the Quebrada Majuelos has a reddish surface due to iron content, this shows a concern with emphasizing the color red in association with the motifs depicted at this site. The blood associations of the Aquatic Composite Being are therefore emphasized with the red pigment. There is also evidence of red pigment at the X02, the site with the two additional Aquatic Composite Beings.

In addition to the red pigment, at QMA01, Panels B, C, and H contain anthropomorphic figures that have trophy head features (Figs. 9.16 and 9.17). The main trophy head trait is the use of lines that run through the lips of these figures, much like the spines on actual Nasca trophy heads. Lines are shown through the lips of trophy head representations even when their eyes are open and appear to be alive. The Nasca Harvester motif also has these lines as well as skeletal ribs. There also seems to be an emphasis on the hair of these anthropomorphic petroglyphs at QMA01. The hair is shown pointing upwards, erect. When Nasca mythical creatures hold a trophy head, they do so by the hair. So the Nasca Aquatic Composite Beings at this location, although not holding a head, are surrounded by figures with full bodied trophy heads as well as the color of blood.

Conclusions

The presence of the Nasca Aquatic Composite Being in portable objects does not indicate a concern with fishing or the abundance of marine resources. It demonstrates a concern with hunting, with death, with blood, and with place. Trophy head or sacrifice iconography and agriculture iconography are not mutually exclusive categories in Nasca art. But, the Aquatic Composite Being is more closely tied to death and killing than to

argicultural production and abundance in this continuum. The red pigment in QMA01 and trophy head traits on QMA01 anthropomorphs support the association between Aquatic Composite Being petroglyphs, decapitation and sacrifice. The evidence of ocean creatures at the edge of the Nasca Pampa (through fossils) make these *quebradas* the appropriate setting for depictions of this monstrous marine predator.

This chapter sought to incorporate the various lines of evidence that could be gathered from a thorough analysis of the context of rock art representations. By examining the place, associated remains, style of the rock art, and landscape characteristics, not only is it possible to discuss the rock art, but also other works and imagery that share similarities with the rock art representations, regardless of the medium. This approach is limited by these stylistic and iconographic similarities, unfortunately. But, with a more thorough documentation of rock art sites in these areas, it would be possible in the future to more thoroughly study the material culture without being limited to a single medium.

Figure 9.1: QMA01 Panel F (photo: Ana Nieves)

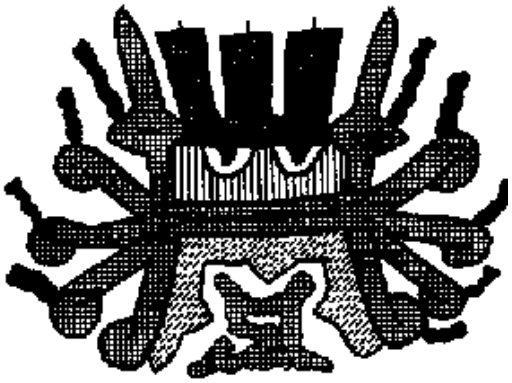


Figure 9.2: Porulx's KW-3 or Bloody Mouth (Proulx 2006: Fig. 5.47)

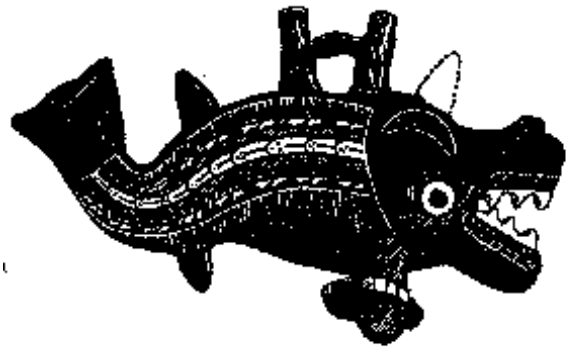


Figure 9.3: Proulx's KW-8, effigy Mythical Killer Whale, or effigy Aquatic Composite Being (Proulx 2006: Fig. 5.53)

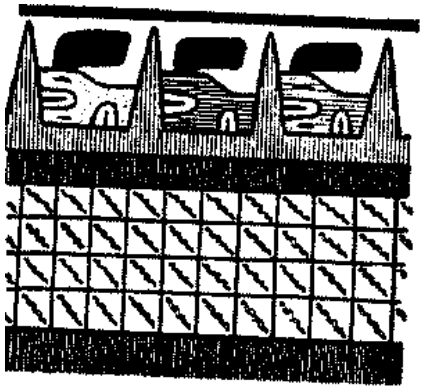


Figure 9.4: Proulx's KW-10 or band of fins (Proulx 2006: Fig. 5.56)

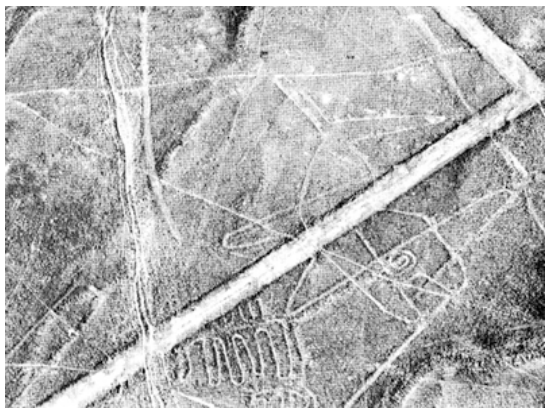


Figure 9.5: Marine animal geoglyph (Reiche 1993: Fig. 9.44)

Figure 9.6: Marine animal geoglyph, possible Mythical Killer Whale or Aquatic Composite Being (after Reindel, Isla and Koschmieder 1999: Abb 4)

Figure 9.7: Branches A and B of Quebrada Majuelos (photo: Ana Nieves)

Figure 9.8: Shark tooth fossil from Quebrada Majuelos (photo: Ana Nieves)

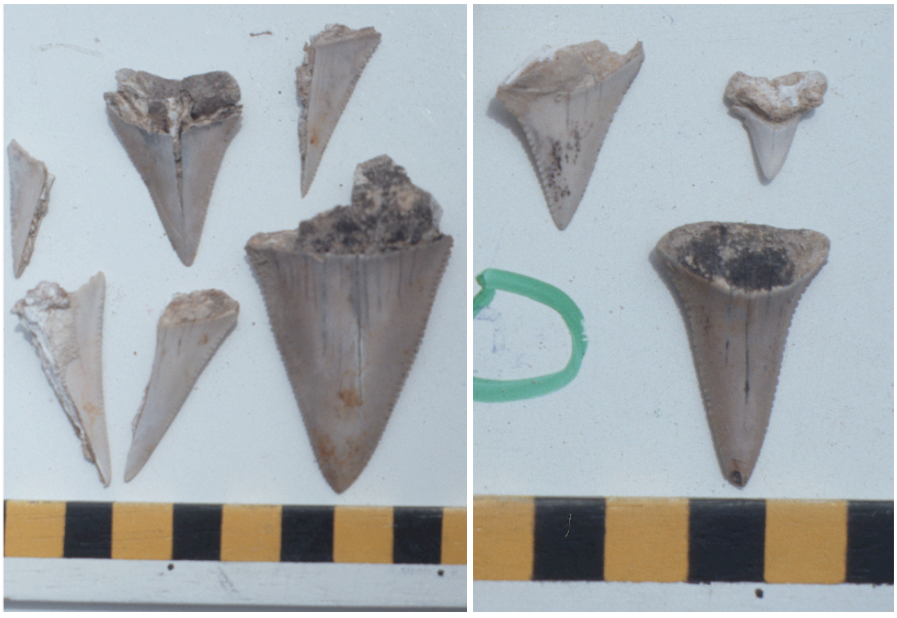


Figure 9.9: More shark teeth fossils from Quebrada Majuelos (photo: Ana Nieves)

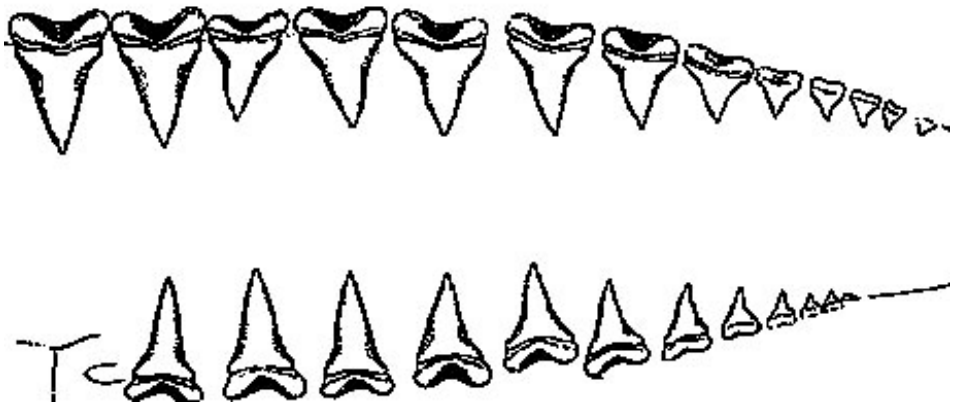


Figure 9.10: White shark teeth (after Florida Museum of Natural History n.d.b)

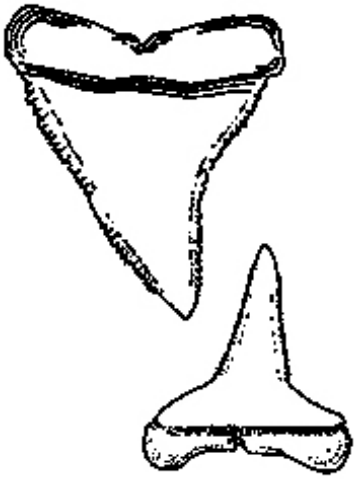


Figure 9.11: Galapagos shark teeth (after Florida Museum of Natural History n.d.a)

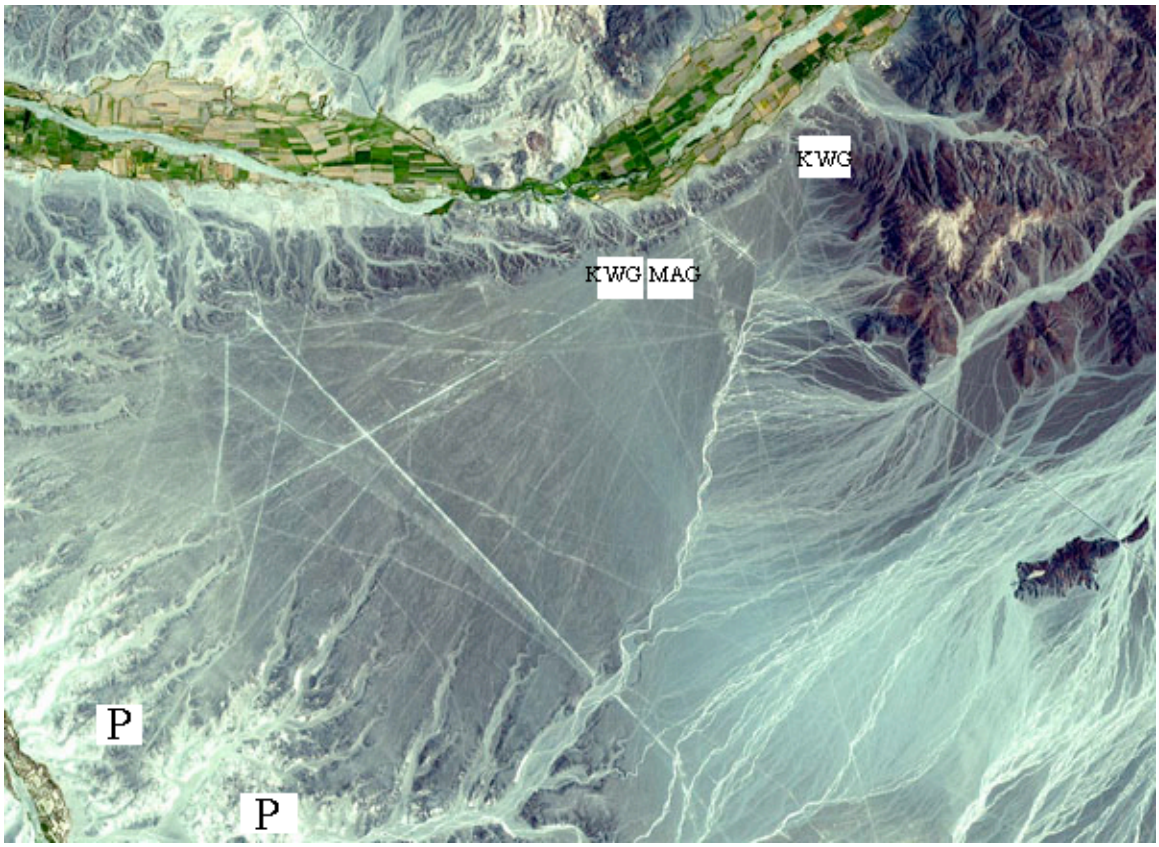


Figure 9.12: Satellite photo of the Nasca Pampa. Petroglyph sites with marine animal iconography, including Mythical Killer Whales are indicated with the letter P. Mythical Killer Whale geoglyphs are indicated with KWG and other marine animal geoglyphs on the *pampas* are indicated with MAG (after NASA/GSFC/METI/ERSDAC/JAROS and U.S./Japan ASTER Science Team 2000)

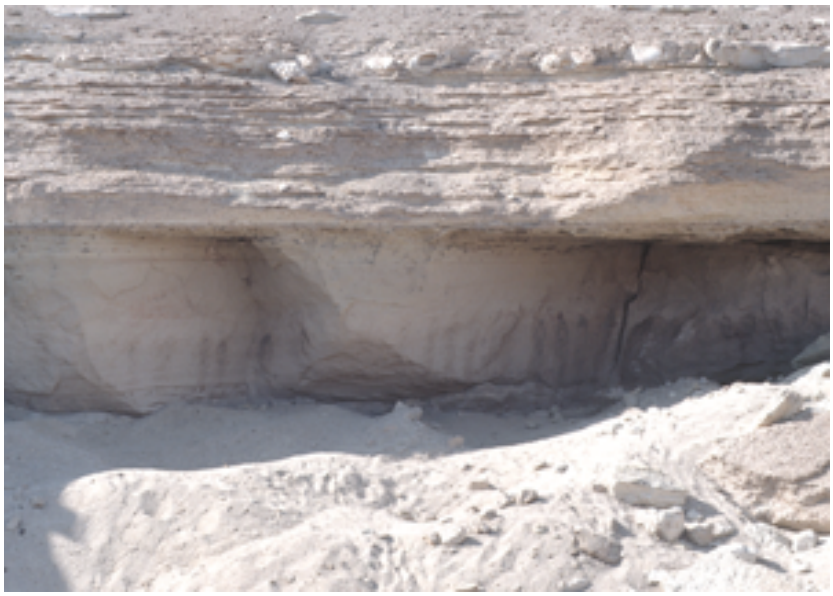


Figure 9.13: QMA01 panels (photo: Ana Nieves)

Figure 9.14: QMA01 Panel C, showing drips of red paint (photo: Ana Nieves)

Figure 9.15: QMA01 Stone with red pigment (photo: Ana Nieves)

Figure 9.16: QMA01 Panel B, Feature A (photo and drawing: Ana Nieves)

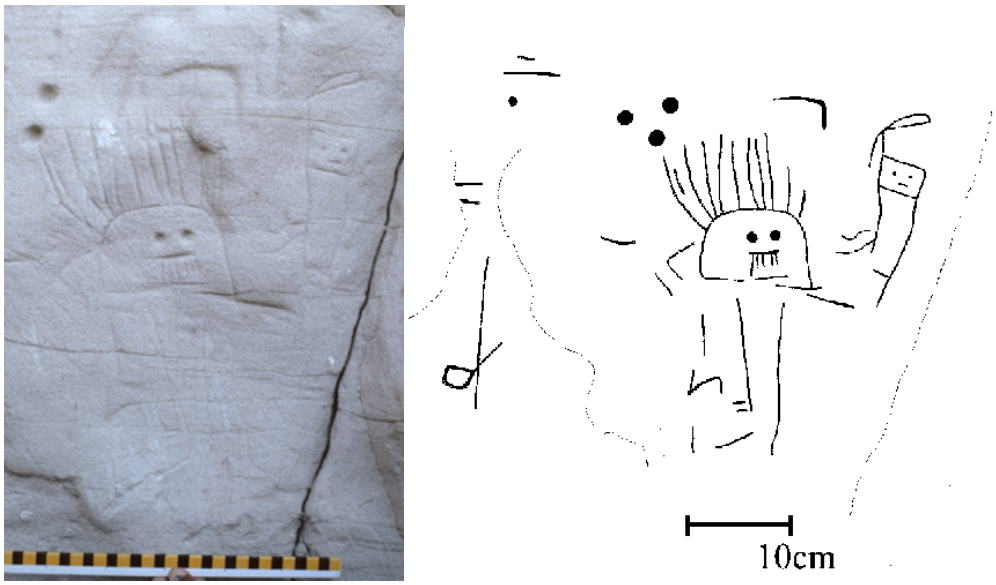


Figure 9.17: QMA01 Panel C, Feature E (photo and drawing: Ana Nieves)

CHAPTER 10 : CONCLUSIONS: NASCA VALLEY ROCK ART SITES IN CONTEXT

The purpose of this dissertation was to systematically study the rock art of one specific area and establish a firm context within which to explain its form and imagery. In order to do this, the study began with a very broad description of the setting, both geographic and cultural. My own research began with a thorough survey of the lower Nasca Valley rock art sites in order to collect data and develop a broad, but focused, corpus for my investigation.

I then proposed a chronology for the rock art. However, the rock art sites of my survey area could not be studied or explained isolated from possibly related material in sites of adjacent valleys. Therefore, I used comparative material from rock art sites from adjacent valleys as well as the area's geoglyphs to develop the proposed typology and chronology for the rock art of the river system. The survey area rock art sites were also compared to the documented sites in the lower Nasca Valley in order to determine if the proposed chronology was consistent with other remains in the valley.

I also addressed the transitional nature of the rock art site locations. I explored the idea of transition and liminality in local constructions of the sacred landscape. In order to do this I focused on locales in the sacred landscape where there is evidence of ancient ritual activity. The same patterns of transition observed in these natural features were observed in the locations of the Nasca Valley rock art. I also proposed that water

pouring rituals were conducted at Northern Cluster rock art sites based on the form and location of groove or channel petroglyphs.

Finally, I conducted an iconographic analysis for one Nasca culture motif, the Mythical Killer Whale, which is depicted in the rock art of the Nasca Valley. Based on the form and physical traits of this figure, I proposed using a different, less species-specific name for it: The Aquatic Composite Being. I further explored the context and associations of the rock art versions of this motif. This provided an ideal situation, where the figure's traits could be discussed in detail alongside the original context of the imagery. All of the aforementioned lines of evidence were crucial to the analysis of the Aquatic Composite Being.

Time and Place in Nasca Valley Rock Art

The survey and subsequent typology proposed here indicated that there was a continuous tradition for rock art (petroglyphs and pictographs) in the Grande River System from the Formative (especially the Early Horizon) through the Early Intermediate Period. Although the actual artwork was impossible to link directly to other mediums of the Middle Horizon and later, there was so much Late Intermediate Period material at Nasca Valley rock art sites to indicate an awareness of the rock art at those locations. Whether any of the petroglyphs date to the Late Intermediate Period is impossible to determine at this time.

Petroglyph, Pictograph, and Geoglyph Relationships

The evidence encountered on my survey supported a clear relationship between rock art large and small. Most of my rock art sites were on the eastern side of the Nasca

Valley. This is the side that borders the Nasca Pampa, the area with the highest concentration of geoglyphs in this river system. Sites with petroglyphs and pictographs in the Nasca Valley were also often in very close proximity to geoglyphs.

The close relationship between these mediums and the proposed typology and chronology of rock art motifs complicate the proposition that petroglyphs preceded the *pampa* geoglyphs (Rendel and Isla 1999; Reindel, Isla and Koschmieder 1999). Reindel, Isla, and Koschmieder tracked a development from the petroglyphs to the anthropomorphic geoglyphs on hillsides to the stylized geoglypghs on the *pampas*. The evidence from my survey indicates that both petroglyphs and *pampa* geoglyphs actually coexisted in the Early Intermediate Period in the Nasca Valley. In fact similar iconography exists in both if one considers the Mythical Killer Whale or Aquatic Composite Being motif.

The Importance of Water in the Nasca Valley

The Northern Cluster groove and channel petroglyphs indicate a concern with the water of the river. Offerings of liquid were highly suggested, if not performed, at groove locations. These locations coincide with an access area between two valleys and a point in the Nasca Valley where water seeps to the surface. Meanwhile, the petroglyphs of the Nasca Mythical Killer Whale suggest a concern with the ocean (salt water) and its relation with the supernatural. The abundance of fossils, and shark teeth fossils in particular, offer tangible traces of the ocean as a location even as far inland as these *pampas*.

Suggestions for Future Research

There is no lack of material for the study of rock art in the Grande River System, and the present study only scrapes the surface of a very small area within this drainage. Motifs could be studied individually, in the same way in which I analyzed the Mythical Killer Whale or Aquatic Composite Being. Some sites are quite complex and require a more detailed analysis, such as site X02. At this site, the figures of Rocks 1 and 3 all face uphill, which is also the direction of Rock 2. Rock 2 depicts either a birth or copulation scene. Could all the site's motifs refer in some way to fertility or procreation? Is the orientation of the motifs significant?

Beyond the survey area, there is also plenty of work to be done. The relationship of motifs across valleys deserves attention, such as the anthropomorphs with the bifurcated headdresses, for example. The connection between motifs of the Grande River System and those of valleys to the north, such as the site of Huancor in Chincha could also shed light on contact between these regions. In the upper portion of the Grande River System, a detailed analysis of the Seated Figure Iconographic Complex and its relation to other archaeological remains is certainly needed, since these motifs are in close proximity to cemeteries and terraces. Individual sites have received little to no attention. The site of La Caseta in the Santa Cruz Valley, for example, has been documented, but not thoroughly studied. The petroglyphs are on the edge of a *pampa* that contains geoglyphs. These petroglyphs there are also undoubtedly connected to those of Chichictara in Palpa. The site of Chichictara has had very little work as well,

beyond documentation. Rock art surveys could also be carried out even further upriver in these upper valleys.

Rock Art and the World View of Ancient South Coast Societies

The evidence points to a long and complicated history of rock art sites in the Grande River System. With time, it is not only styles that change and evolve, but also symbols and meaning. How can one generalize about the significance of rock art, when we cannot pinpoint the exact period in which any of them were made?

In his discussion of the ceramics of the Nasca culture, Proulx described religion as "the most dominant theme in Nasca Ceramic iconography" (Proulx 2006: 198). We certainly cannot ascertain that this is the case in Late Intermediate Period ceramics, primarily because their motifs tend to be geometric or very abstract. In a way it is easier to decipher symbols in the art of the Nasca culture by examining patterns of substitution and abbreviation of iconic representations (Nieves, n.d.). In Late Intermediate Period ceramics, we often lack the ability to identify some of these very abstract icons. However, both the Nasca and Late Intermediate Period societies seem to have shared a concern with place. Often their ceramics are found together at significant landscape features. They are both found on the Nasca Pampa, close to geoglyphs. At some Nasca valley petroglyph sites, even if the iconography and style clearly indicated Paracas (late Early Horizon) associations, it was Late Intermediate Period ceramics that were found on the surface. In this part of the world and the Andes, although styles have changed dramatically, and cultures have fluctuated in complexity, there appear to be some long standing traditions that have remained consistent. The concern with landscape features is

certainly one of those traditions, as is the offering of ceramics at these locations. Rock art making, in small or large scale, also seems to have been executed for many centuries in this area, continuously. Movement, whether for ritual or practical purposes, was also an important practice, which was also associated to these rock art sites. The form of some *pampa* geoglyphs indicates that they were made to be experienced through walking. Rock art sites were located along paths and within *quebradas* that connected the river valley to the Nasca Pampa. Rock art, large and small, is associated to people moving across a landscape that was charged with meaning through centuries of ritual activity. What people saw as they move is as important as what people did. Repeated stops at specific locations, and repeated actions served the function of maintaining the significance of locales through memory. Rock art sites were not just located in the landscape, they re-presented the landscape to Nasca Valley inhabitants. The abundance of Late Intermediate Period ceramics on an Early Horizon rock art site truly evidences the significance of rock art in the memory of Nasca Valley populations.

APPENDIX A : ROCK ART SITES IN THE LOWER NASCA VALLEY

Sites with the prefix RN are sites that originally were discovered and described by Donald Proulx during his 1998 settlement pattern survey. Sites with the prefix QM are those that were discovered during my study of the Quebrada Majuelos (more information on that study can be found at the end of this report). The rest of the sites, rock art sites on the Nasca Valley but outside Quebrada Majuelos, have an X prefix and are numbered from 1 to 22.

The labeling of individual boulders or panels depended on the site type. If some of the rock art was located on exposed layers of sandstone on the sides of the *quebrada*, I assigned letters to the panels or boulders on which the rock art was located. If the site consisted of rolled boulders with rock art, each boulder was assigned a number. Features within panels or boulders are assigned a letter for identification. For a detailed chart of the characteristics of the rock art of the survey area, see Figure A 40. Maps of the rock art sites and associated remains are located at the end of this Appendix.

RN43

Coordinates: S14° 48' 55" W 75° 11' 25"
IGN Map: Edition 1-TPC Series J731 Page 1841II
UTM Coordinates: 795 664
Previous Work by Donald Proulx: Proulx described the site as a residential area with tombs. There are remains of stone structures. Proulx assigned the following periods to these structures: Middle Horizon, Early Intermediate (Nasca 3) and Late Intermediate. Proulx described some of the petroglyphs as having Chavin traits.
Location: This site was on a natural platform on the southwest side of the Nasca River, between Tambo de Perro and the confluence of the Nasca River with Quebrada Usaca. Large monoliths form a "wall" that can be seen from a distance. Some of the stones in and in front of this "wall" have petroglyphs.
Numbering: In my study the rocks were numbered from 1 to 10, starting with the large stones that formed the "wall." They were numbered from left to right along the "wall" and later continued with the stones that were in front of this "wall."
Documentation Methods: The petroglyphs in the best condition were traced.
Associated Ceramics: Middle Horizon, Early Intermediate (Nasca 3) and Late Intermediate.
Periods: (See Associated Ceramics)
Documentation by: Ana Nieves, Leo Rojas, Joseph Uribe
Documentation date: June 10, 2000

Description of the rock art:

Rock 1

Decorated Area: 1.64 x 1.20 m
Orientation: N
Location: This is the easternmost monolith on the "wall."
Technique: pecked
Condition: some damage
Causes of Deterioration: some natural erosion as well as purposeful damage by visitors (a cube has been drawn over the rock with fine lines)
Iconography and Composition: This stone has two examples of a motif that is also on other rocks within this same site. Both were located in the right center of the decorated side of the stone. The motif consists of wide lines with rows of oval forms at both sides. These oval forms are attached to the central line, making this motif resemble a phytomorphic form.

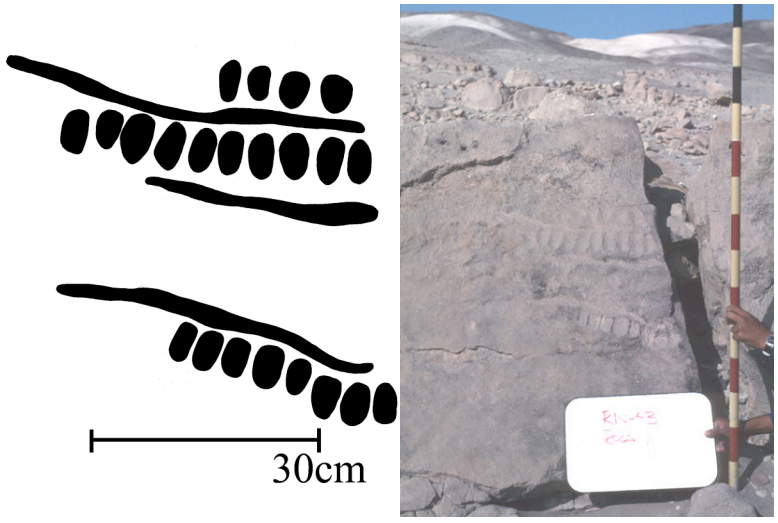


Figure A 1: Rock 1 at Site RN43 (photo and drawing: Ana Nieves)

Rock 2

Decorated Area: 0.72 x 1.12 m
Orientation: N
Location: Part of the monolith "wall." Directly west of Rock 1
Technique: pecked, carved
Condition: some damage
Causes of Deterioration: natural
Iconography and Composition: This rock only has a single line on the upper portion of the rock and a small pecked form.

Rock 3

Decorated Area: 0.93 x 1.40 m

Orientation: N
Location: Part of the monolith "wall." Two stones west of Rock 2.
Technique: pecked or carved
Conservation: some damage
Causes of Deterioration: some natural damage, but also possible graffiti (lines)
Iconography and Composition: There are at least three quadrupeds found on the right half of the rock. The bodies of each one are formed by a horizontal line as a body and four long vertical forms that create the animals' legs. There are no separate forms for the heads. There are other small marks between these three zoomorphic forms, but these are difficult to see.

Rock 4

Decorated Area: 0.56 x 0.59 m
Orientation: N
Location: Part of the monolith "wall." Directly to the west of Rock 3
Technique: pecked
Conservation: poor
Causes of Deterioration: natural causes
Iconography and Composition: There are various pecked areas on the stone, but it is difficult to distinguish figures and forms.

Rock 5

Decorated Area: 0.40 x 0.52 m
Orientation: N
Location: Part of the monolith "wall." Directly west of Rock 3
Technique: pecked or carved
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: Although the surface is eroded, one can distinguish a zoomorphic form resembling that of Rock 3.

Rock 6

Decorated Area: 1.35 x 1.18 m
Orientation: N
Location: Part of the monolith "wall." To the west of Rock 5
Technique: pecked or carved and incised
Conservation: some damage
Causes of Deterioration: natural causes
Iconography and Composition: The surface is covered by various circular forms between 5 and 13 cms in diameter. Some are quite deep. There are zoomorphic forms n the right portion of the boulder. The central and left portions have lines and pecked areas but it is difficult to distinguish recognizable forms.

Rock 7

Decorated Area: 0.48 x 0.72 m
Orientation: N
Location: Part of the monolith "wall." To the west of Rock 6, after a recess in the "wall."
Technique: pecked
Conservation: poor
Causes of Deterioration: natural causes
Iconography and Composition: The condition of this stone is very poor. The upper portion has a line a four oval forms, similar to the motifs in Rock 1.

Rock 8

Decorated Area: 1.09 x 1.35 m
Orientation: N
Location: Part of the monolith "wall." To the west of Rock 7
Technique Used: pecked
Conservation State: poor
Causes of Deterioration: natural causes
Iconography and Composition: This stone has similar motifs as Rock 1.

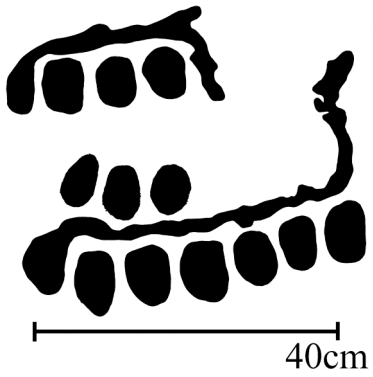


Figure A 2: Rock 8 at Site RN43 (drawing: Ana Nieves)

Rock 9

Decorated Area: 0.72 x 1.01 m
Orientation: Up (the petroglyphs are on upper part of the rock)
Location: In front of the monolith "wall" and to the north of Rock 6
Technique: pecked
Conservation: poor
Causes of Deterioration: natural causes
Iconography and Composition: The upper part of this stone is decorated with two circular shapes and more of the same motifs that decorate Rock 1.

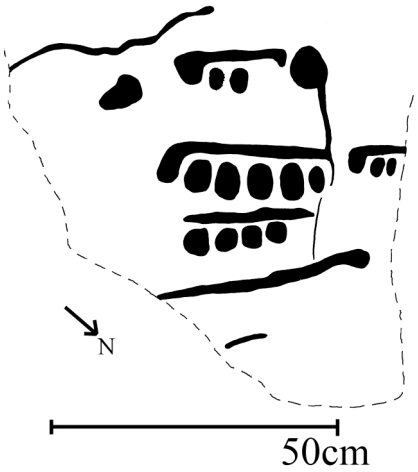


Figure A 3: Rock 9 at Site RN43 (drawing: Ana Nieves)

Rock 10

Decorated Area: 0.68 x 0.82 m
Orientation: N
Location: This is a fallen rock at the edge of the cliff toward the north of the monolith "wall"
Technique: pecked or carved
Conservation: poor
Causes of Deterioration: natural causes
Iconography and Composition: This stone has a single zoomorphic form.

RN50

Coordinates: S 14° 46' 32" W 75° 13' 09"
IGN Map: Edition 1-TPC Series J731 Page 1841II
UTM Coordinates: 765 6643
Previous work by Donald Proulx: Proulx divided this site into two areas: the first consists of rocks with petroglyphs. The second is a cemetery from the Late Intermediate period. Proulx described rock art motifs in his final report for the INC.
Location: This group of rocks is on a very steep hill. They are visible from (and continue to) the base of the hill. The site is close to the point where the modern road goes into the riverbed. There are various homes in the area (Majuelos) and residents know the location of this site. They refer to this site as the "drawing of the tunic." The area around the rock art has been looted and is covered with pottery sherds.
Numbering: In this study, rocks were labeled from 1 to 7, starting with the rocks lower on the hillside and working our way up. The last rock is on top of the hill, separated from the others. Besides the numbered rocks, other boulders also had what appeared to be small markings or single scratched lines, but these were not included here. I was also told that there was another boulder with the image of a fox, but I did not find it in my visit to the site (unless it is the zoomorph on Rock 7).

Documentation Methods: Only some motifs were traced. Decorated areas were photographed.
Associated Ceramics: Proulx only reported ceramics from the Late Intermediate Period, but I also saw some Nasca (Early Intermediate Period) sherds.
Periods: Early Intermediate Period, Late Intermediate Period.
Documented by: Ana Nieves, Miguel Rojas, Leo Rojas
Date: June 8th and 28th, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 3.30 x 2.45 x 2.40 m
Orientation: There are petroglyphs on all sides but mostly in the SW and SE sides
Location: This is one of the largest boulders on the middle of the hill's slope.
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural
Iconography and Composition: There are female genitals depicted on all sides of this boulder. There is a small design made with curved lines in the SW side, but is difficult to determine what it represents.

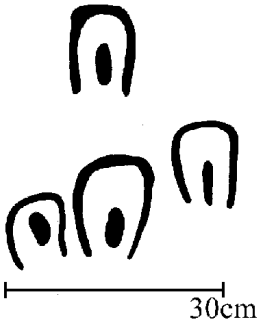


Figure A 4: RN50 Rock 1(drawing and photo: Ana Nieves)

Rock 2

Approximate size of the boulder: 1.40 x 1.90 x 1.50 m
Orientation: S and SW
Location: At the same elevation as Rock 1 but to the south.
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: The S side has representations of female genitalia. There is also an anthropomorph.

Figure A 5: Details of rock art in Rock 2, Site RN50. The image on the left is an anthropomorph and the photo on the right shows vulva designs (photo and drawing: Ana Nieves)

Rock 3

Approximate size of the boulder: 2.50 x 1.20 x 2.40 m
Orientation: N
Location: This boulder is very close to Rock 2, almost next to it, but at a higher elevation on the slope of the hill.
Technique: pecked, incised
Conservation: some damage
Causes of deterioration: natural causes but also some man-made damage
Iconography and Composition: The clearest form in this boulder consists of a d-shaped or semi-circular form filled with a concentric circle motif (A). The semi-circular form has small radiating lines around most of it (the exception being the lower portion of it). There is a single line descending from the semi-circular shape. Below this is a pecked area, perhaps representing a zoomorph (B).

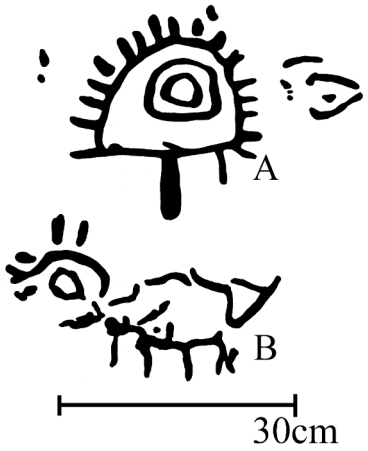


Figure A 6: Rock 3, RN50 (drawing: Ana Nieves)

Rock 4

Approximate size of the boulder's decorated side: 3 x 2.40 m
Orientation: SW
Location: Next to Rock 3, but higher on the slope.
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: This is a very large boulder but only a small portion of it is decorated. The SW side has a 9 x 9 cm area depicting female genitals

Rock 5

Approximate size of the boulder: 2.60 x 1.30 x 1.70 m
Orientation: The boulder has petroglyphs facing S, N, and W.
Location: 10 m north of Rock 1
Technique: pecked, incised
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: On the side facing south there is an anthropomorph (B) and a zoomorph (A) on the upper portion. The middle portion has the motif that local farmers refer to as the "tunic" (C). It seems however to represent a headdress of some kind. There are some marks under this motif but it is difficult to identify what they represent (D). On the west side there are is a pecked area that may represent an anthropomorph. There is only a square motif on the north side.

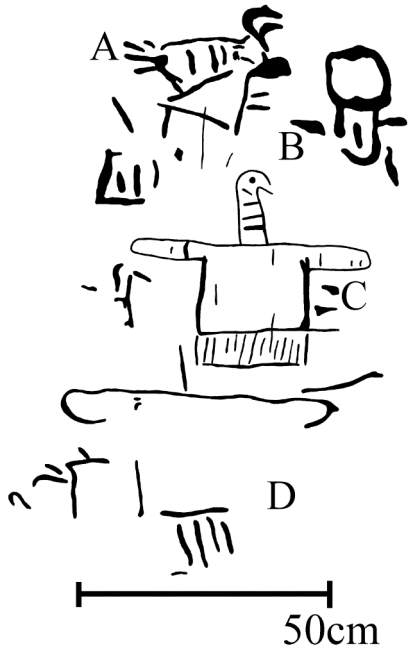


Figure A 7: Rock 5, RN50 (drawing: Ana Nieves)

Rock 6

Approximate size of the boulder's decorated side: 4.40 x 2.30 m
Orientation: N
Location: 5 m to the SE of Rock 5
Technique: carved or incised
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: There is evidence for several anthropomorphs, although only one can be seen clearly. The surface of the rock has broken off and at least two figures have been damaged. The feet of both are still present, both facing to the right.

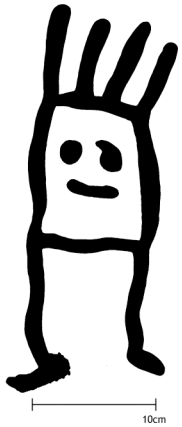


Figure A 8: Motif from Rock 6, RN50 (drawing: Ana Nieves)

Rock 7

Approximate size of the boulder: 90 x 90 x 75 cm
Orientation: Up (the petroglyphs are on the upper part of the rock)
Location: This boulder is higher on the slope and isolated from the previously described boulders.
Technique: pecked, carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are small circular forms, a zoomorph in profile facing left and resembles a camelid. Above and next to the zoomorph are two lines, one of which continues to the ground.

RN51

Coordinates: S 14° 43' 55" W 75° 13' 42"
IGN Map: Edition 1TPC Series J731 Page 1841I
UTM Coordinates: 754 714

Previous work by Donald Proulx: Proulx was the first to describe the motifs depicted in this site. He pointed out that there are many common characteristics between this site and site RN49 in his survey (QMA01 in my survey).
Location: The site is located in a small *quebrada* that ends near Jumana. The boulders with petroglyphs start close to the road and continue inside the *quebrada* close to the *pampa*.
Numbering: I used letters to identify the stones because the first two areas with petroglyphs were on exposed rock strata instead of isolated boulders. I started with those that were closer to the *pampa* and continued downhill towards the modern road.
Documentation Methods: All boulders with rock art were numbered and photographed but not all of the petroglyphs were traced.
Associated Ceramics: Proulx did not include information about the ceramics he found at this site. I did not find any associated diagnostic sherds.
Periods: Proulx attributed these petroglyphs to the Early Intermediate Period and the Late Intermediate Period.
Documented by: Ana Nieves, Leo Rojas, and Alfredo Salas
Date: March 14th and Arpil 27th, 2000
Description of the rock art:

Rock A

Approximate size of the decorated area: Representational petroglyphs occupy about 30 x 20 cms. Circles extend for about a meter to the left of the antrhopomorph.
Orientation: SE and SW
Location: The petroglyphs are located on an exposed stratum of sandstone close to the *pampa*. The surface of the stone is curved.
Technique: pecked or carved, scratched
Conservation: some damage
Causes of deterioration: natural causes, but there is also some graffiti in the area
Iconography and Composition: Facing the SE is an anthropomorph made with simple lines. Next to it is another figure of a zoomorph in the same style. There is graffiti close to these figures which may indicate that they are not old. However, the row of circular depressions is similar to those found on site QMA01 (Proulx's RN49). The circular depressions are about 3 cm in diameter.

Rock B

Approximate size of decorated area: 1.50 x 0.60 m
Orientation: NW
Location: Like Rock A, this is also a sandstone stratum. It is located directly in front of Rock A.
Technique: pecked, carved, scratched, possible smoothing of surface
Conservation: poor
Causes of deterioration: natural causes

Iconography and Composition: There are several lines, some of which are at right angles with each other. There are also circular marks. It is possible that natural indentations on the sandstone were made larger or more pronounced.

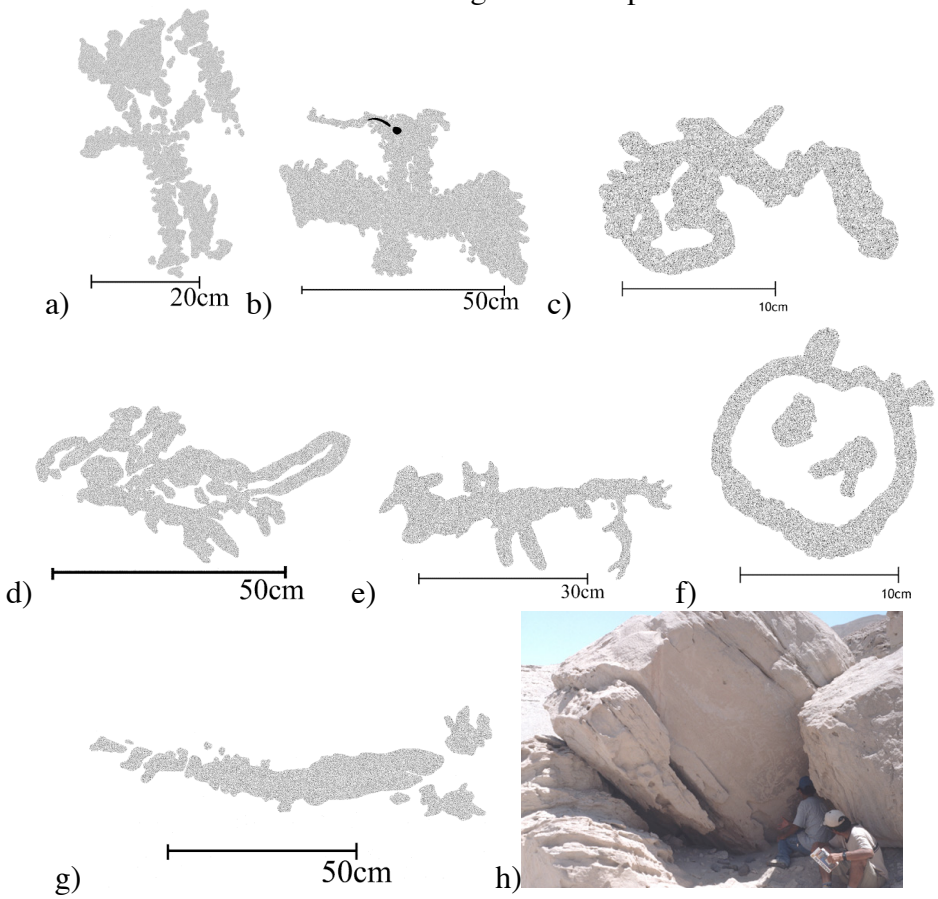


Figure A 9: Rock C at RN51: a) Feature A; b) Feature B; c) Feature C; d) Feature D; e) Feature E; f) Feature F; g) Feature G; h) view of rock (photo and drawings: Ana Nieves)

Rock C

Approximate size of the boulder's decorated side: 1.70 x 3.30 m
Orientation: NE
Location: This stone is across the *quebrada* from Rock B but slightly downhill. It is a large boulder with a flat side facing the NE. The boulder may have rolled from a position further up the *quebrada* since the motifs depicted in the petroglyphs are not right-side up.
Technique: pecked, carved
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: There are serpentine forms, a face-like motif, and two quadrupeds, one of which has a long tail. Below them is a bird with extended wings. Below the bird is an anthropomorph who hold an elongated form in one hand. These motifs are lightly pecked and therefore very different from the petroglyphs found in

Rocks A and B. The bird has a couple of marks which are carved deeper, the eye and a line through the beak.

Rock D

Approximate size of the boulder's decorated side: 2.00 x 0.80 m
Orientation: E
Location: About 50 m down the *quebrada* from Rock A
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are only three lines pecked on this boulder. They do not seem to represent anything specific.

Rock E

Approximate size of the boulder's decorated side: 0.40 x 0.50 m
Orientation: Up (the petroglyphs are on the top portion of the rock)
Location: Up the *quebrada* from Rock D (between Rocks A and D).
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: This boulder also has small lines without a recognizable representational motif.

Rock F

Approximate size of the boulder's decorated side: 1.45 x 2.40 m
Orientation: SE
Location: This boulder is close to the entrance to the *quebrada* and is easy to see from the road that enters the Nasca Valley at Jumana.
Technique: pecked, carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: At first glance this stone seems to be decorated with thick lines similar to those found in Rocks G and H. However, the lines form the shape of a bird, which is easy to view a few feet away from the boulder. Donald Proulx identified this motif specifically as the Nasca "Horrible Bird." The head faces the viewer's left, but it has some damage and the only portion that remains is the curved form on top of the head. To the viewer's right is the bird's triangular wing. Below the bird is an appendix decorated with lines. The "Horrible Bird" motif is often associated with trophy heads, although none are visible in this petroglyph. Natural cracks on the boulder were used to help define the bird's body. The similarities in the type, size, and width of the grooves with Rocks G and H lead me to believe these were all carved around the same time.

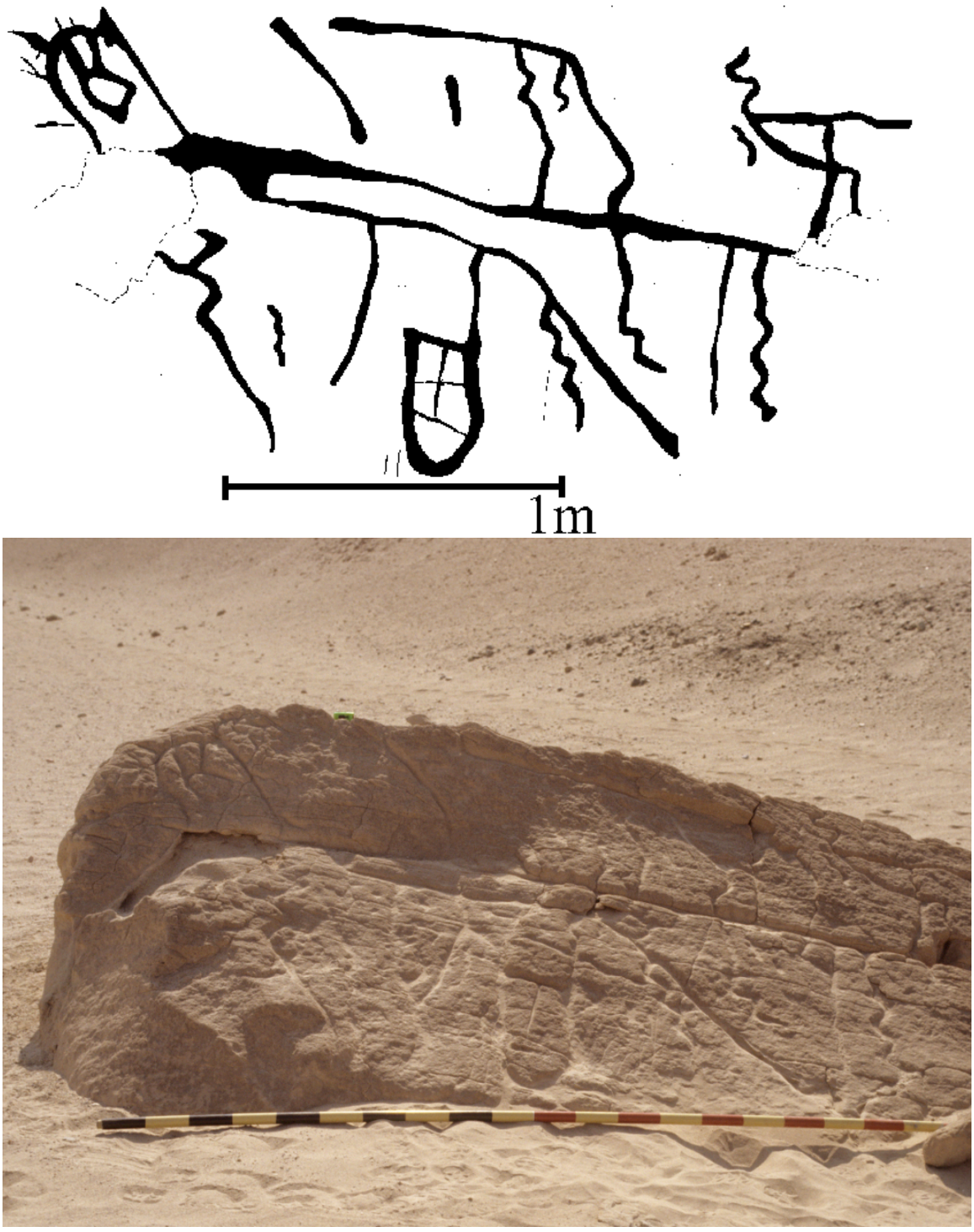


Figure A 10: Rock F, RN51 (photo and drawing: Ana Nieves)

Rock G

Approximate size of the boulder's decorated side: 1.30 x 2.30 m
Orientation: E
Location: This rock is close to Rock F and directly below Rock H.
Technique: pecked, carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are many curved and zig zag lines that cover the surface of this boulder. These are deep grooves or channels. David Johnson, who worked with Proulx in this area, argued that the lines shown on this boulder represent a map of the area.

Rock H

Approximate size of the boulder's decorated side: 1.10 x 1.80 m
Orientation: SE
Location: Directly above Rock G on the slope on the side of this *quebrada*.
Technique: pecked, carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: This boulder also has the same grooves or channels visible on Rocks G, I and J. In this case they are zigzags.

Rock I

Approximate size of decorated area: 20 x 60 cm
Orientation: N
Location: At the entrance of the *quebrada*, to the SW of Rock H.
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: This boulder has two zigzags in the same style as Rocks G, H and J.

Rock J

Approximate size of decorated area: 1.50 x 1.70 m
Orientation: E
Location: At the entrance of the *quebrada*.
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: This boulder has similar markings as those found in the previous three boulders. In this case two of the lines cross.

Rock K

Approximate size of decorated area: 2.10 x 1.00 m
Orientation: N and up (upper side of boulder)
Location: Close to the road, next to Rock J
Technique: pecked or carved
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: There are several lines on the rock surface in small groups.

Rock L

Approximate size of the petroglyph: 10 x 8 cm
Orientation: NW
Location: Near the entrance to the *quebrada* and close to the road. The petroglyph is very small in relation to the size of the boulder.
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: It resembles an animal head.

Rock M

Approximate area on the top of the boulder: 1.80 x 2.00 m
Orientation: Up (top of the boulder)
Location: next to Rock F
Technique: pecked, carved
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: There are several lines on the top of this boulder, including a zigzag with angular forms. There is a single zigzag on a side of the boulder continuing a groove on the top of the boulder. There is also a semicircular form on the top of this boulder.

RN23

Coordinates: S 14° 44' 57" W 75° 13' 49"
IGN Map: Edition 1TPC Series J731 Page 1841I
UTM Coordinates: 753 694
Previous work by Donald Proulx: Proulx described this site as a small cemetery on a hillside. He did not find any of the petroglyphs during his documentation of the cemetery in 1998.
Location: The site is close to a modern structure with arches. The petroglyphs are on stones close to the entrance to a *quebrada*. Rocks 1 and 2 are about 25 m separated from each other. Rock 2 is on the hillside while Rock 1 is on the floor of the *quebrada*.
Numbering: Rocks were numbered 1 and 2.

Documentation Methods: Both rocks were traced and photographed
Associated Ceramics: Proulx documented Early Intermediate Period and Late Intermediate Period sherds.
Periods: Early Intermediate Period, Late Intermediate Period
Documented by: Ana Nieves, Leo Rojas
Date: April 29, 2000
Description of the rock art:

Rock 1

Approximate size of the petroglyph: 25 x 50 cm
Orientation: N
Location: The boulder is in the lower part of the *quebrada*.
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes (perhaps some purposeful damage as well?)
Iconography and Composition: The main figure is an anthropomorph with a circular head and rectangular body. Its arms are extended. There seems to be another figure to its left, but it is not as clear.

Rock 2

Approximate size of the petroglyph: 18 x 24 cm
Orientation: Up (the antrhopomorph is carved on top of a flat stone with its feet pointing north, the lines face east)
Location: This stone is on the hillside about 25 m from Rock 1.
Technique: pecked, carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: There are several lines on the E side of the stone. The anthropomorph is on the top. It has a stylized body consisting primarily of an oval form. The arms are simple lines which are extended at both sides. The figure holds a circular object in one hand. Both its head and the circular object the figure holds have radiating lines that emerge from them. There are a few vertical lines below this figure as well.

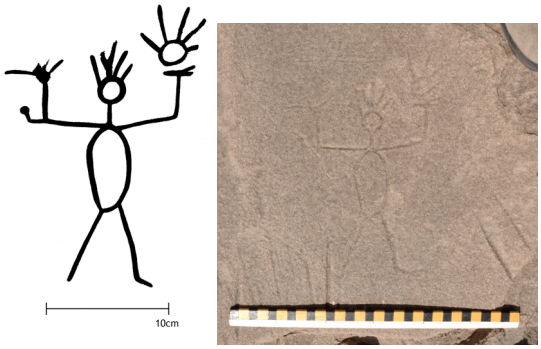


Figure A 11: Rock 2, RN23 (drawing and photo: Ana Nieves)

QMA01 (Proulx's RN49)

This site was catalogued by Donald Proulx as RN49 during his survey of the Nasca and Grande Valleys.
Coordinates: S 14° 46' 01" W 75° 11' 55"
IGN Map: Edition 1TPC Series J731 Page 1841II
UTM Coordinates: 786 674
Previous work by Donald Proulx: Proulx described this site as a stop or resting place for people walking from the Pampa San Jose to the Nasca Valley. Proulx provided a description of the site in his INC report.
Location: The site is deep inside a narrow *quebrada* on the north side of Quebrada Cangana Majuelos.
Numbering: In his final report for the INC Proulx numbered some of the motifs including the whale, the fish (or shark), a "dolphin," the anthropomorphic figures, the felines, and the circular depressions. In this survey I labeled each separate section of the exposed sandstone stratum with rock art as a separate panel. Separations between panels consist of cracks, broken portions, or areas without petroglyphs.
Documentation Methods: All panels were photographed and traced using clear plastic.
Associated Ceramics: Ceramic sherds at the site are Nasca 3.
Periods: Nasca 3
Documented by: Ana Nieves, Leo Rojas, Joseph Uribe, Eulalia Ahón, Alfredo Salas, Felipe Benavente
Description of the rock art:

Panel A

Approximate size of decorated area: 50 x 40 cm
Orientation: SE
Location: This panel is within a natural cave.
Technique: scratched
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: These are a series of lines in different directions. There is not a representational motif. The authenticity of these is questionable since these marks do not resemble anything else at this site.

Panel B

Approximate size of decorated area: 2.20 x 2.30 m
Orientation: W
Location: This panel is a wall of exposed sandstone, directly to the south of Panel A.
Technique: pecked, scratched, carved or incised, painted
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: The top portion has an anthropomorphic form (A). Its head is square and its eyes are round. Vertical lines descend from its mouth. It holds a

rectangular form in its left hand and has breast marks on its chest. Under the figure is an area with a series of circular depressions and lines. Below this area are more representational forms. To the left is an anthropomorphic figure with parts of a feline on its head (B). This figure unfortunately is in poor shape. To the right are two felines (C and D), one of which has a long extension emerging from its chin (similar to the extensions at sites X02 and QMC14). Under these is a painted rectangular form (F) and under this form are several carved rectangles (one of them has radiating lines around it). Directly to the right is an anthropomorph with a rectangular head and round eyes (E). This figure has vertical lines crossing its lips. Next to this figure is a zoomorph (H), possibly a camelid. To the right are lines that form a grid form with two large carved circles (I). There is also evidence of paint on this panel.

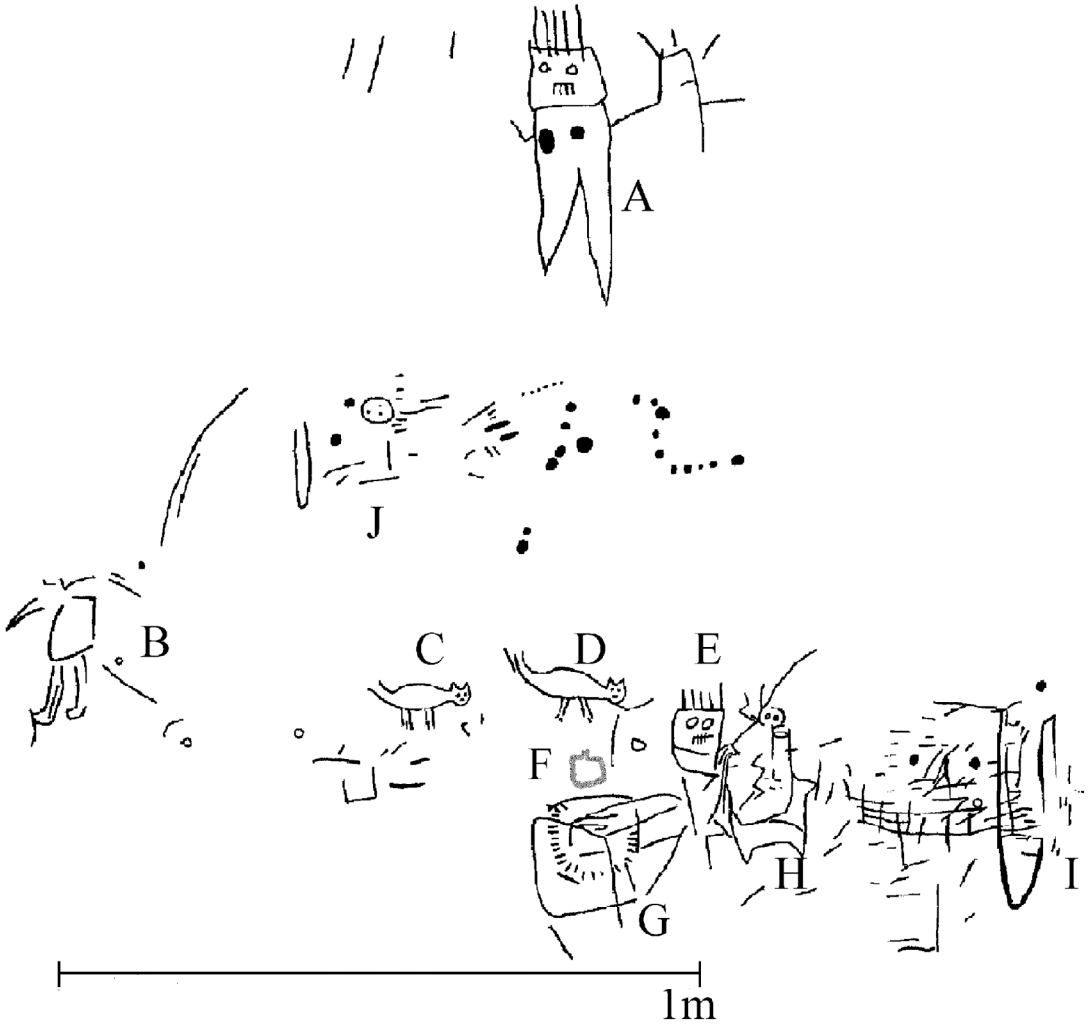


Figure A 12: QMA01 Panel B (drawing: Ana Nieves)

Panel C

Approximate size of decorated area: 1.70 x 2.03 m

Orientation: NW
Location: In the same strata of sandstone as Panel B (to its right). It is separated by irregularities and breaks in the sandstone strata.
Technique: pecked, carved or incised
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: To the left are vertical lines. Next to these is an anthropomorph similar to those on Panel B, but with a semi-circular head. This figure holds a smaller figure with a rectangular head. In the upper and central portion of the panel are several circular depressions lined up with each other. Under these marks are a feline with an elongated body and another figures that seems to represent a bird. To the right are more lines, most of which are vertical.

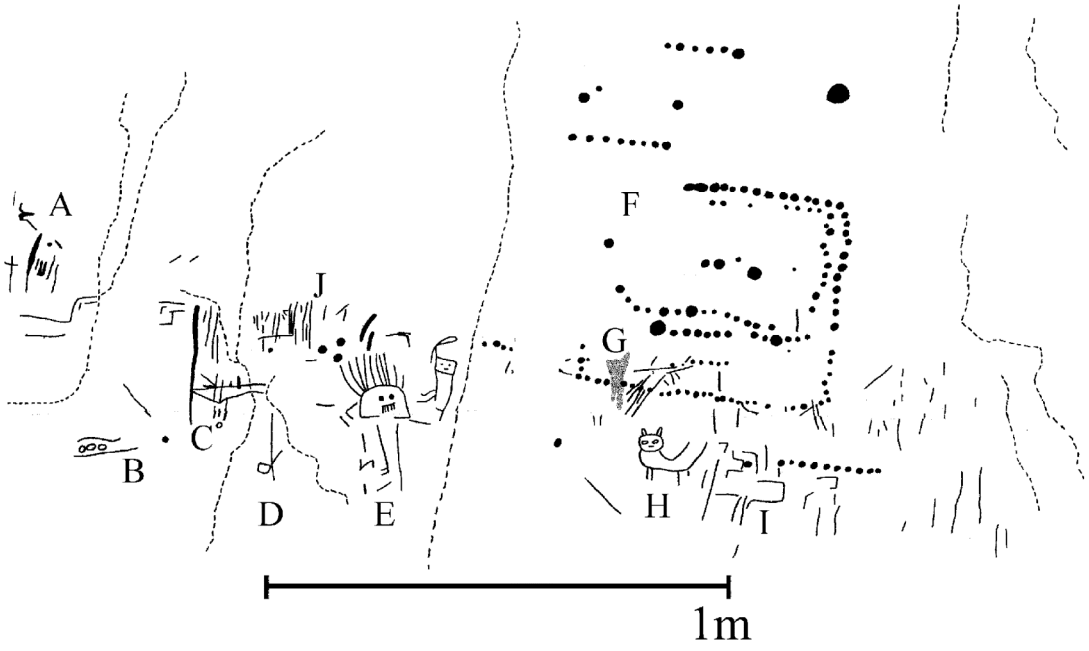


Figure A 13: Panel C, QMA01 (drawing: Ana Nieves)

Panel D

Approximate size of decorated area: 2.30 x 1.55 m
Orientation: W
Location: This is a continuation of the same layers of sandstone, separated by surface irregularities and breaks.
Technique: pecked, carved or incised
Conservation: some damage
Causes of deterioration: natural causes, also graffiti (top portion of panel)
Iconography and Composition: There are a series of aligned circular depressions that divide this panel in two (D). Above the line there are portions of square forms (B, C). In

the middle of the panel is an anthropomorph with diagonal extensions (A). In the lower portion are vertical lines.

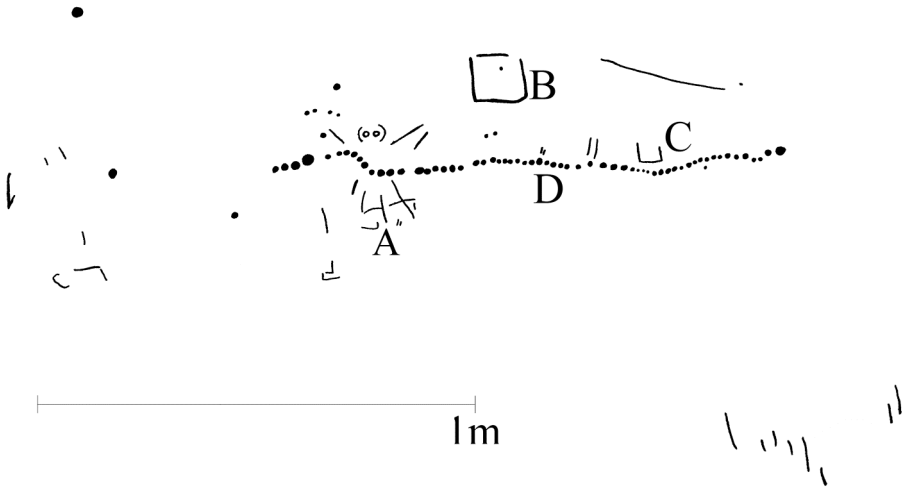


Figure A 14: Panel D, QMA01 (drawing: Ana Nieves)

Panel E

Approximate size of decorated area: 2.25 x 3.00 m
Orientation: W
Location: 7 m south of Panel D, in the same layer of exposed sandstone
Technique: pecked, carved or incised
Conservation: some damage
Causes of deterioration: natural causes, seems to have man-made damage as well
Iconography and Composition: There is a large marine animal with triangular fins. The body is covered with parallel lines and its eye is round. Proulx identified this animal as a shark. Below this figure are a series of very light lines.

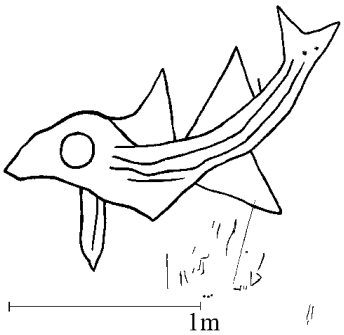


Figure A 15: Panel E, QMA01 (drawing: Ana Nieves)

Panel F

Approximate size of decorated area: 3.70 x 3.10 m
Orientation: W
Location: 6.50 m to the SE of Panel E, in the same exposed sandstone layers
Technique: pecked, carved or incised (pigment added to the rock surface?)
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are two types of petroglyphs: large drawings made with deep grooves and small drawings made with light lines. The largest petroglyph depicts a Nasca Mythical Killer Whale or Aquatic Composite Being with its characteristic banded body. There is a row of round forms in the central band. The figure has a circular eye and triangular fins. The head has what appears to be fox-like or feline features and an extended human arm. The figure faces right and is over 2 m long. Above this figure is a small, lightly drawn version of the same figure. It is located between the fins of the larger Mythical Killer Whale or Aquatic Composite Being. The small figure could be an initial "sketch" of the larger version of the same motif. There are several vertical and horizontal lines around both of these figures. There is a zoomorph above the head of the larger figure, possibly a camelid. Below the arm of the larger figure is a petroglyph that resembles the two spouts and bridge from a Nasca ceramic vessel. From the opposite side of the *quebrada* one can clearly see a sequence of vertical black forms topped by a reddish area.

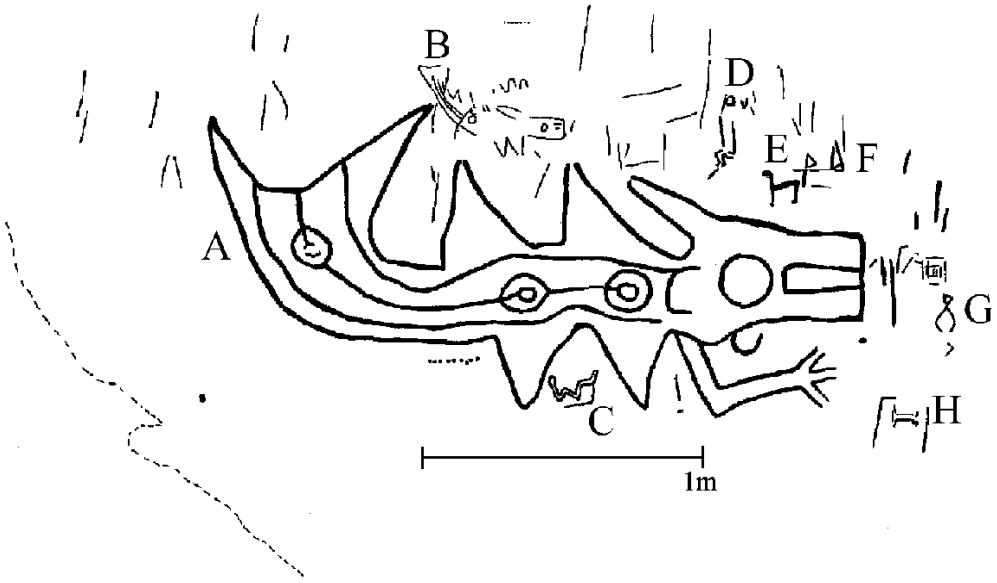


Figure A 16: Panel F, QMA01 (drawings: Ana Nieves)

Panel G

Approximate size of decorated area: 3.21 x 2.70 m
Orientation: W
Location: 2 m from Panel F, in the same layer of exposed sandstone
Technique: pecked, carved or incised
Conservation: poor
Causes of deterioration: natural causes, upper portion also has some graffiti
Iconography and Composition: This panel has the figure that was identified as a dolphin by Proulx. After tracing this figure however I noticed that there are other lines that are part of this motif and it is very difficult to identify this as a specific animal. This figure is in the central portion of the panel. There is a rectangle, an elongated motif, and a row of circular depressions to the left. To the right is a radiating figure (that appears to be sun or star shaped) and the feet of an anthropomorph.

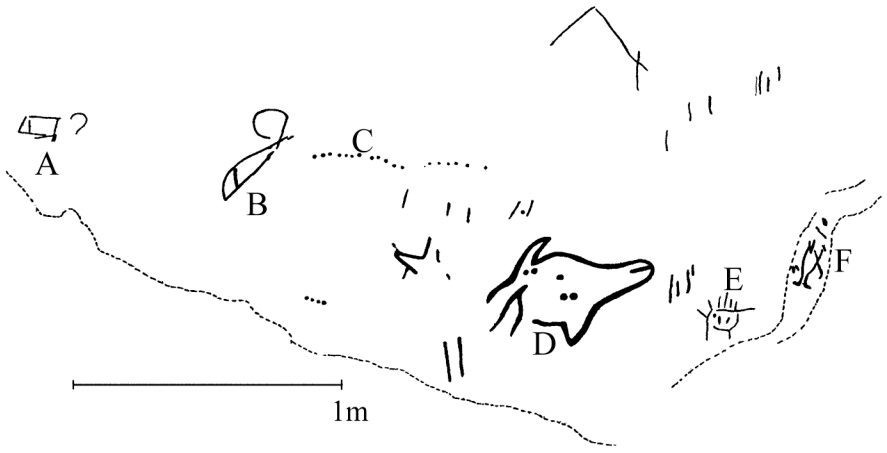


Figure A 17: Panel G, QMA01 (drawing: Ana Nieves)

Panel H

Approximate size of decorated area: 2.90 x 1.40 m
Orientation: S
Location: This is on the other side of the *quebrada* facing Panels F and G.
Technique: pecked, carved or incised
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: This panel has a small zoomorph and an anthropomorph. The anthropomorph has a rectangular head and tooth-shaped body. Its eyes are round and it has several lines on its head There are also lines descending from it mouth, It is very similar to the anthropomorphs in Panels B and C. Three more lines are to its right.

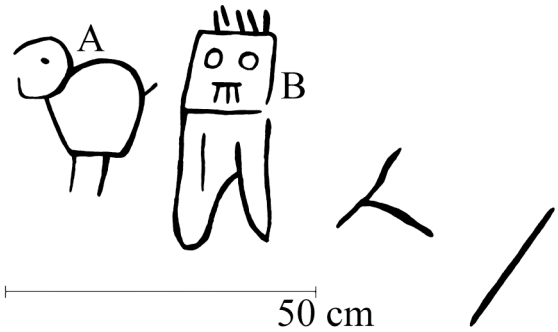


Figure A 18: Panel H, QMA01 (Ana Nieves)

QMB03

Coordinates: S 14° 45' 29" W 75° 12' 49"
IGN Map: Edition 1TPC Series J731 Page 1841II
UTM Coordinates: 770 684
Location: This site is in the upper portion of a small quebrada that ends in branch B of Quebrada Cangana Majuelos (See Appendix B). The petroglyphs are found inside a natural cave-like formation.
Numbering: Panels were not numbered because of the small site of the site, but the four motifs are listed below.
Documentation Methods: Motifs were traced and photgraphed.
Associated Ceramics: There were no associated ceramics.
Periods: Unknown
Documented by: Ana Nieves, Eulalia Ahón, Alfredo Salas Díaz, Leonardo Rojas Escajadillo
Date: February 15th, 2000
Description:
The natural cave-like formation is approximately 3 m long. The petroglyphs are on the sandstone "walls" and "floor." Although similar in formation to QMA01 (Proulx's RN49), this site is much smaller. In both sites motifs are carved or pecked directly on the exposed sandstone. Both sites also have cave-like formations (possible shelters?). There are four petroglyphs (carved or incised and pecked) at this site: (1) A grid form made with lightly carved lines that cross. This motif is about 16 x 12 cm. (2) A figure with a round body and feet. It measures approximately 12 x 10 cm. (3) A rectangle with a line through the center, measuring approximately 16 x 9.5 cm. And (4), a zoomorph that appears to be a feline, measuring 20.5 x 27 cm. Petroglyph 1 is the only one on the cave floor. The rest are located on the cave wall. Although no pottery sherds were found at the site, there were remains of corncobs, leaves, and animal bones.

QMC14

Coordinates: S 14° 46' 32" W 75° 12' 23"
IGN Map: Edition 1TPC Series J731 Page 1841II
UTM Coordinates: 778 664
Location: The site is next to QMC13 (See Appendix B), on the northern side of Quebrada Cangana Majuelos' Quebrada C (See Appendix B). The petroglyphs are on large pieces sandstone.
Numbering: I labeled the petroglyph covered stones A through E from west to east.
Documentation Methods: Tracing and photographs.
Associated Ceramics: Late Intermediate Period
Periods: Paracas (iconography) and Late Intermediate Period (ceramics)
Documented by: Ana Nieves, Eulalia Ahón, Alfredo Salas Díaz, Leonardo Rojas Escajadillo, Rubén García.
Date: March 9th and April 26th, 2000
Description of the rock art:

Rock A

Approximate size of decorated area: 30 x 60 cm
Orientation: SW
Location: Western end of the side
Technique: pecked, carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: Two figures: The top portion has a zoomorphic figure. Under it is a group of curved lines.

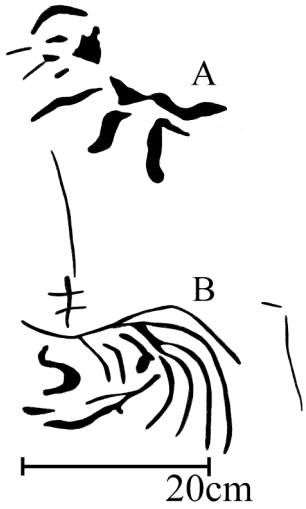


Figure A 19: Rock A, QMC14 (drawing: Ana Nieves)

Rock B

Approximate size of decorated area: 100 x 50 cm

Orientation: S
Location: East of Rock A
Technique: pecked, carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: To the left is an anthropomorph with rays over its head. It holds objects in each hand. The right hand holds a circular object that hangs from a vertical form. This could be a representation if a trophy head. The other hand holds a long object that could be a staff. To the right of this figure is another figure with an oval body and two extensions as feet. Even further to the right is a feline in profile with a tongue-like extension. The extension ends in a head shape with radiating lines around it. The motif resembles felines in Paracas textiles.

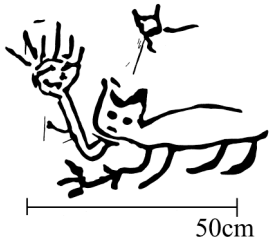


Figure A 20: Feline from Rock B, QMC14 (drawing: Ana Nieves)

Rock C

Approximate size of decorated area: 60 x 60 cm
Orientation: S
Location: East of Rock B
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: This is another feline (A) with a tongue-like extension that also ends in a head. There is a smaller zoomorphic figure (C) next to the feline. A third figure (B) is above both of these but it is difficult to identify.

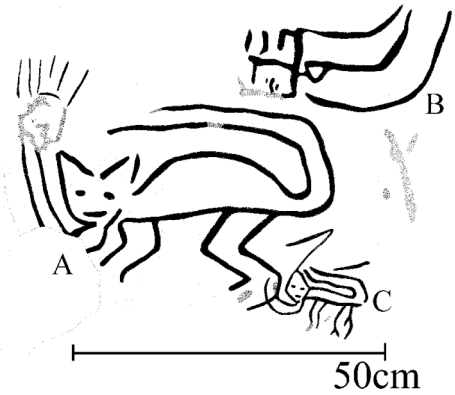


Figure A 21: Rock C, QMC14 (drawing: Ana Nieves)

Rock D

Approximate size: n.a.
Orientation: SW and SE
Location: Directly east of Rock C
Technique: pecked, incised
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: To the SW side of this boulder is a rectangular shape with a line through the center and a grid motif. On the SE side is a zoomorphic figure.

Rock E

Approximate size of decorated area: 10 x 40 cm
Orientation: W
Location: To the east of Rock D
Technique: scratched or incised
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: rectangular form

X01

Coordinates: S 14° 44' 32" W 75° 13' 47"
IGN Map: Edition 1TPC Series J731 Page 1841I
UTM Coordinates: 752 702
Location: This site is in the same *quebrada* as Proulx's site RN21, but deeper into the *quebrada*. There are several large boulders on the floor of the *quebrada*. Some have pecked petroglyphs. Their condition is very poor and it is difficult to distinguish specific forms. There are also circular piles of stones around the petroglyph covered boulders.
Numbering: Boulders were numbered 1 to 5.
Documentation Methods: The five boulders were traced and photographed.
Associated Ceramics: Early Nasca (Early Intermediate Period) and Late Intermediate Period.
Periods: Nasca 3 (EIP) and Late Intermediate Period (These identifications are based on ceramics in the area, not the iconography or style of the rock art).
Documented by: Ana Nieves, Joseph Uribe.
Date: April 28th and 30th, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder's decorated side: 1.5 x 2.00 m
Orientation: S
Location: This is the largest boulder in the area.
Technique: pecked, incised
Conservation: some damage

Causes of deterioration: natural causes (surface is eroded)
Iconography and Composition: To the left of the decorated side is a figure with extended arms. It holds an object in each hand and has rayed lines emerging from its head. To the upper right of the figure is a pecked area about 20 x 20 cm which looks like a series of circular marks. There are lines to the lower right in an area of about 47 x 27 cm, but it is impossible to determine if these lines form a representational motif.

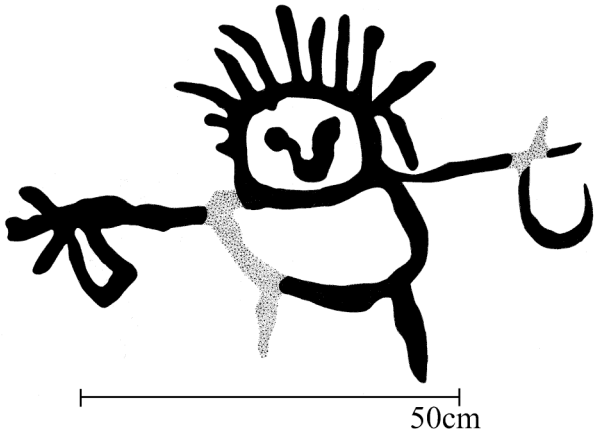


Figure A 22: Rock 1, QMA01 (drawing: Ana Nieves)

Rock 2

Approximate size of the boulder's decorated side: 1.5 x 1.5 m
Orientation: W
Location: Next to Rock 1, to the NW.
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: These are 7 circular carvings, one at the center surrounded by the other 6. These circular depressions are .25 to .5 cm deep.

Rock 3

Approximate size of the boulder's decorated side: 2.40 x 1.50 m
Orientation: W
Location: Directly north of Rocks 1 and 2.
Technique: pecked, incised (?)
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: On the western side of the boulder there are markings which may represent zoomorphs, although this are is badly damaged. There are also scattered lines.

Rock 4

Approximate size of the boulder's decorated side: 2.00 x 1.5 m

Orientation: S and N
Location: About 10 m NW of Rock 3.
Technique: pecked, scratched
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: On the south side is a large face with very legible eyes, nose, and teeth. Below is a zoomorph facing right. There is an eroded and damaged figure to the left of this. On the north side is a figure with radiating lines on its head. There is also a separate grouping of radiating lines that have been lightly scratched on the surface of the rock.

Rock 5

Approximate size of the boulder's decorated side: 2.30 x 1.50 m
Orientation: W and S
Location: 15 m SW of Rock 4
Technique: pecked
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: This boulder has a very clear zigzag. There are lines to the zigzag's left side.

X02

Coordinates: S 14° 44' 32" W 75° 13' 07"
IGN Map: Edition 1TPC Series J731 Page 1841I
UTM Coordinates: 764 698
Location: This site is in a *quebrada* that ends in the NE side of the Nasca Valley. It is near Proulx's site RN23, where we also found petroglyphs. Site X02 is deep inside a *quebrada*, in an area with large, rolled boulders. Only some of these boulders carry petroglyphs.
Numbering: I started numbering the rocks from the SW. Rocks 2 and 3 are at a higher elevation on the hill. Rocks 4, 5, 6, and 7 are on the floor of the *quebrada*.
Documentation Methods: All boulders were photographed. Rocks 1, 2, and 3 were traced completely. Rock 4 had both S and NE sides traced.
Associated Ceramics: Early Intermediate Period (middle Nasca) and Late Intermediate Period.
Periods: Early Horizon to Early Intermediate Period (because of the Nasca ceramics and the Nasca and Paracas iconography), and Late Intermediate Period (because of the ceramic sherds in the area)
Documented by: Ana Nieves, Joseph Uribe, and Leo Rojas
Date: May 1st, 2nd, and 3rd, 2000
Description of the rock art:

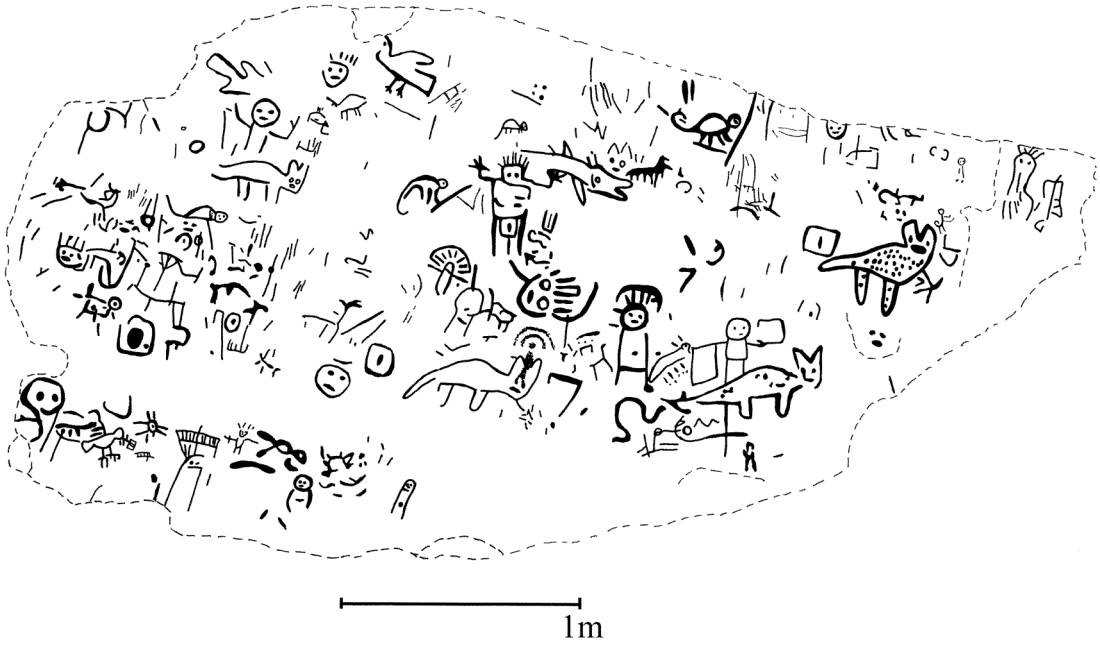


Figure A 23: Rock 1, Site X02 (drawing: Ana Nieves)

Rock 1

Approximate size of the boulder's decorated side: 4.10 x 2.50 m
Orientation: NE
Location: This rock is to the W end of the group of decorated boulders, at the base of the side hills. Side NE of this boulder is relatively flat. The top portion of the boulder is chipping off. Rock 2 is slightly more elevated than this boulder.
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: This boulder is completely covered with figures, some of which are connected to each other. The large majority of the profile zoomorphic figures face the right or uphill.
MOTIFS ARE LABELED IN THE FOLLOWING IMAGES.

Figure A 24: Top left of decorated are on Rock 1 (drawing: Ana Nieves)

Figure A 25: Top center of Rock 1 (drawing: Ana Nieves)

Figure A 26: Top right of Rock 1 (drawing: Ana Nieves)

Figure A 27: Bottom left of Rock 1 (drawing: Ana Nieves)

Figure A 28: Bottom center of Rock 1 (drawing: Ana Nieves)

Rock 2

Approximate size of the boulder's decorated side: 3.60 x 1.60 m
Orientation: SE
Location: On the hillside hat borders the *quebrada*, close to Rock 1 but at a slightly higher elevation on the slope.
Technique: painted
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are three zoomorphs, possibly camelids. All are yellow but one is fading. The pair to the right seems to be connected to each other. One of these zoomorphs is considerably smaller than the other.

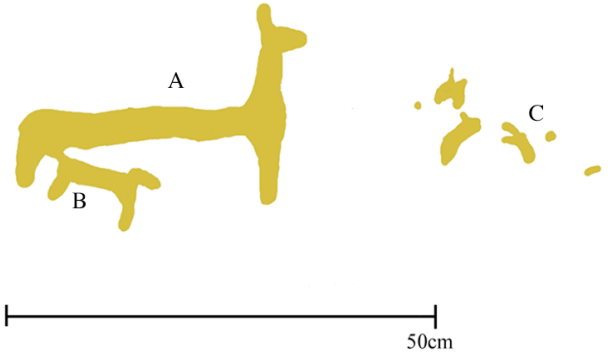


Figure A 29: Rock 2, Site X02 (drawing: Ana Nieves)

Rock 3

Approximate size of the boulder's decorated side: 1.60 x 4.00 m
Orientation: SW
Location: Almost at the same elevation as Rock 2, but to the NE.
Technique: pecked, incised, painted
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: There are at least 5 painted quadrupeds in profile view. Two are yellow and three are red. There could have been more at some point but have faded (there are traces of more red and yellow paint outside of these five zoomorphs). These zoomorphs all face left or uphill. The petroglyphs on this boulder include a zoomorphic head facing left. Two standing anthropomorphs are next to this head, one of which touches its head and the other holds an elongated object. The second figure has rayed lines around its head and appears to have a line representing a phallus. To the right of these figures is a rectangular shape divided into 4, with lines emerging from the top. Besides this are a bird and a quadruped. Interestingly, these two figures have a different orientation than the other figures in this boulder. Their heads face downwards. (These figures could predate the rest. The boulder may have rolled into its current position before the rest of the paintings and petroglyphs were made.)

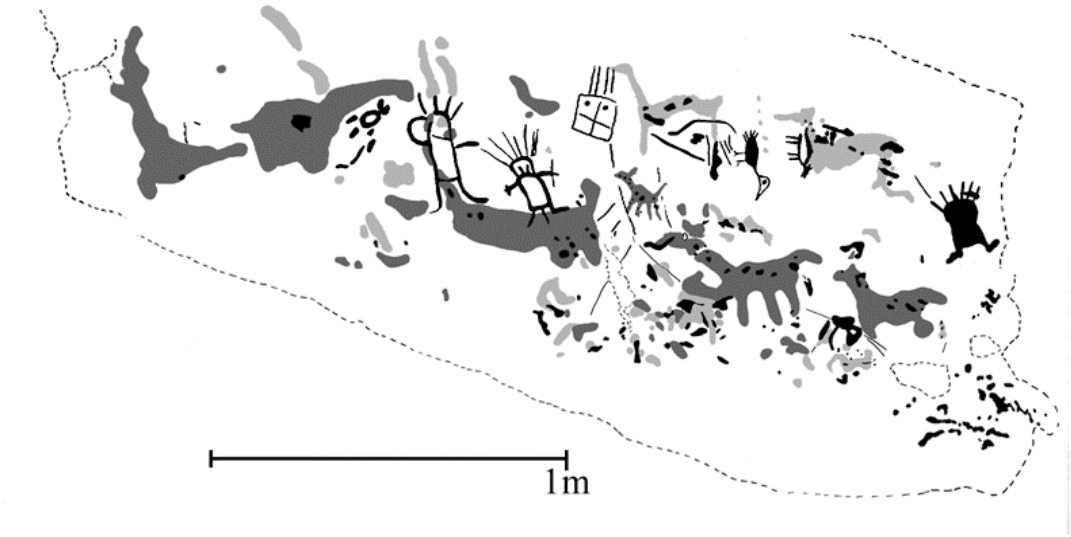


Figure A 30: Rock 3, Site X02 (drawing: Ana Nieves)

Rock 4

Approximate size of the boulder's NE side: 1.70 x 1.20 m
Approximate size of the boulder's S side: 3.00 x 1.70 m
Orientation: NE and S
Location: Next to Rock 3, to the NE.
Technique: pecked, painted

Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: The NE side has two vulva representations and several lines. On the S side is a representation of a Nasca Mythical Killer Whale or Aquatic Composite Being with a triangular ear, triangular teeth and an extended arm. On the left side are three anthropomorphic figures with bifurcated headdresses, a rayed form, and traces of red and yellow pigment.

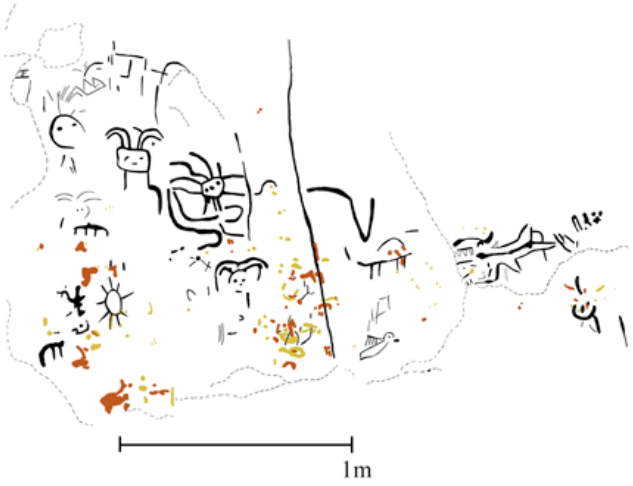


Figure A 31: Rock 4 (south side), Site X02 (drawing: Ana Nieves)

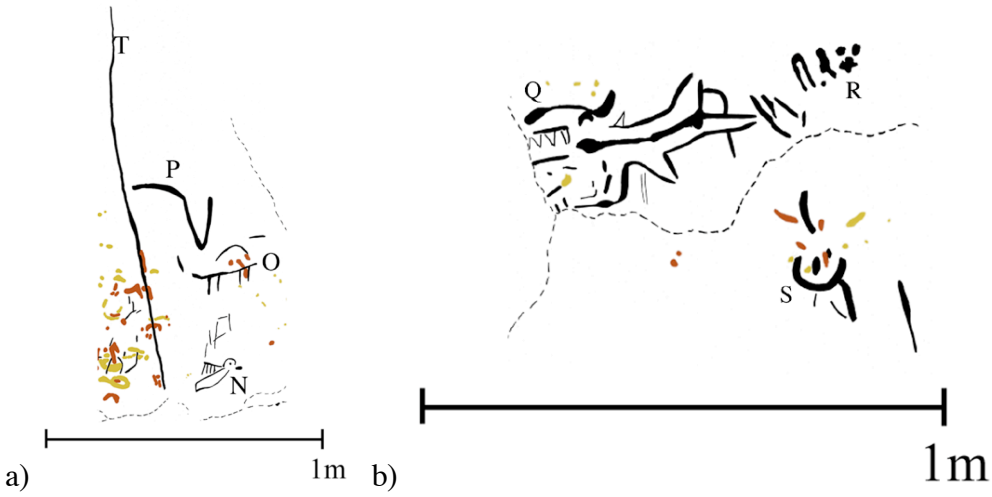
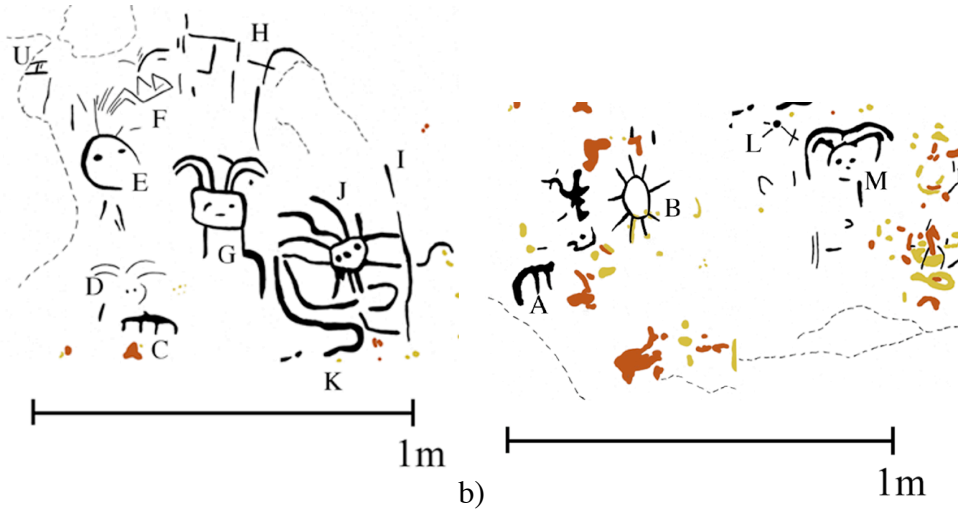


Figure A 32: a) central portion of wouth side of Rock 4; b) right portion of south side of Rock 4 (drawings: Ana Nieves)



a) b)

Figure A 33: a) left portion of south side of Rock 4; b) lower portion of south side of Rock 4 (drawings: Ana Nieves)

Rock 5

Approximate size of the boulder's decorated side: 1.30 x 0.33 m (boulder measures approximately 2.50 x 3.50 x 2.00 m)
Orientation: W
Location: Next to Rock 4, to the SE.
Technique: painted
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: Starting from the left: red zigzag, unidentifiable figure inn yellow, a reddish unidentifiable figure, and a red vertical zigzag.

Rock 6

Approximate size of the boulder's decorated side: 1.40 x ? m
Orientation: Up (top of boulder)
Location: 16 m to the E of Rock 1
Technique: scratched
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: This is a small drawing on the top of this boulder. It is a small triangle about 18 cm high made with very thin lines.

Rock 7

Approximate size of the boulder's decorated side: 0.94 x ? m
Orientation: Up (top of boulder)
Location: 8 m to the E of Rock 1
Technique: pecked

Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: This is a simple line about 1 cm wide and 11 cm long.

X03

Coordinates: S 14° 48' 35" W 75° 11' 30"
IGN Map: Edition 1TPC Series J731 Page 1841II
UTM Coordinates: 793 627
Location: This site faces site RN44 in Proulx's settlement pattern survey. It is on top of a steep slope where a series of rolled boulders are located, close to the entrance to a shallow *quebrada* on the NE side of the Nasca Valley. The rolled boulders are not very large.
Numbering: Boulders were numbered 1 to 9 starting with the boulders near the entrance to the *quebrada,* and continuing towards the edge of the steep slope.
Documentation Methods: Some of the rocks were traced. All were photographed.
Associated Ceramics: Two sherds were found in the area, both were from the Late Intermediate Period.
Periods: Sherds date this site to the Late Intermediate Period, but not the style of the petroglyphs.
Documented by: Ana Nieves, Joseph Uribe, Leo Rojas
Date: June 6th and 13th, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder's decorated side: 1.00 x 1.20 m
Orientation: NE
Location: It is located in the N end of the side, close to the entrance to the *quebrada*.
Technique: pecked, carved
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: To the left is an anthropomorph with a bifurcated headdress similar to those found at site X02. The figure seems to hold a round object. And has two circular forms carved where breasts would be located. There are pecked areas above and besides this figure but it is difficult to determine if they represent anything specific. A representation of a head is to the right of the anthropomorphic figure, but it is made with thinner lines.

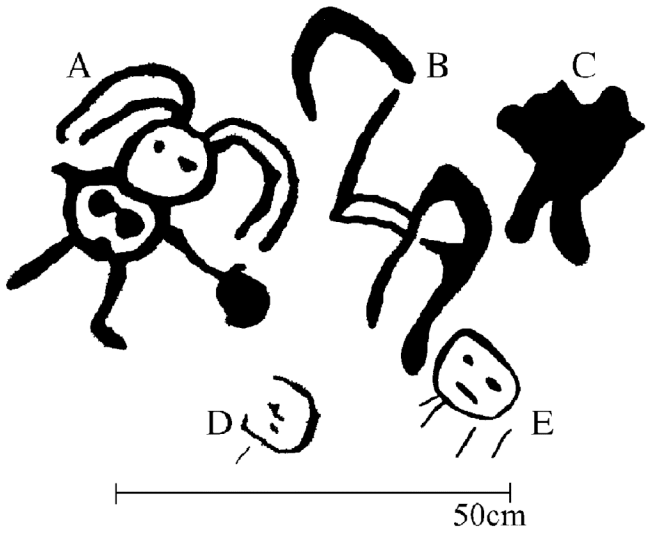


Figure A 34: Rock 1, X03 (drawing: Ana Nieves)

Rock 2

Approximate size of the boulder's decorated side: 46 x 70 cm
Orientation: Up (top of stone)
Location: close to the steep slope
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: This stone has a spiral covering the top.

Rock 3

Approximate size of the boulder's decorated side: 60 x 44 cm
Orientation: Up (top of stone)
Location: Next to Rock 2
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: A spiral covers the top portion of the stone.

Rock 4

Approximate size of the boulder's decorated side: 47 x 74 cm
Orientation: slightly tilted to the SW
Location: 4 m away from Rocks 2 and 3
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: A spiral covers the top of this rock.

Rock 5

Approximate size of the boulder's decorated side: 30 x 20 m
Orientation: NW
Location: 5 m from Rocks 2 and 3
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: This rock has a series of straight lines, but it does not appear to depict a representational motif.

Rock 6

Approximate size of the boulder's decorated side: 40 x 40 m
Orientation: S
Location: 1 m from Rock 4
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: There is a circular form with a long extension. It is difficult to see some portions of the design.

Rock 7

Approximate size of the boulder's decorated side: 75 x 80 m
Orientation: SE
Location: Between Rocks 8 and 9, and between Rocks 2 and 3.
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There is an anthropomorph with a semi-circular headdress with rayed forms. It has a rectangular body and clearly marked facial features.

Rock 8

Approximate size of the boulder's decorated side: 35 x 14 m
Orientation: NE
Location: There are some exposed stones, not rolled boulders, between Rock 1 and the grouping of Rocks 2, 3 and 4.
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: It is very difficult to see what is depicted. There is a pecked area that possibly represents a zoomorph.

Rock 9

Approximate size of the boulder's decorated side: 16 x 22 m

Orientation: NE
Location: Next to Rock 8.
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: The rock is very damaged but there are definite pecking marks.

X04

Coordinates: S 14° 48' 16" W 75° 11' 28"
IGN Map: Edition 1TPC Series J731 Page 1841II
UTM Coordinates: 793 633
Location: This site is deep inside a *quebrada* upriver from Site X03. This is the *quebrada* behind Proulx's RN48. There are several rolled boulders but only one has rock art on it.
Numbering: Only one rock with petroglyphs.
Documentation Methods: The petroglyph was traced.
Associated Ceramics: There were no pottery sherds in the area.
Periods: undetermined
Documented by: Ana Nieves, Joseph Uribe, Leo Rojas
Date: June 13th, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 3.00 x 1.05 x 1.00 m (decorated area: 60 x 40 cm)
Orientation: SW (towards the river)
Location: In a group of rolled boulders in the base of a *quebrada*.
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: There is an anthropomorph with a rectangular head and large feet. Next to it is a rectangular figure.

X05

Coordinates: S14° 48' 17" W75° 11' 51"
IGN Map: Edition 1TPC Series J731 Sheet 1841II
UTM Coordinates: 787 633
Location: This site is near Proulx's RN-47, immediately above two *chacras* or agricultural fields (which at that time were dry). Near the site there are several big, white rocks that are visible from the river. This is a segement of the valley without a road so we actually had to drive on the riverbed. There are several rolled boulders on the hillside but only some of them were decorated. We had to divide the site in two parts: NW and

SE. Immediately above the site, on the *pampa*, there is a geoglyph (*campo aclarado/barrido*) and piles of stones.
Numbering: Rocks 1 to 10. There are at least three rocks which have a dark color (visible paint in some cases) but these marks were made recently.
Documentation Methods: Some petroglyphs were traced
Associated Ceramics: No decorated diagnostic sherds.
Periods: Undetermined
Documented by: Ana Nieves, Joseph Uribe
Date: June 14 & 16, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 1.20 x 1.20 x 1.15 m (decorated side: 50 x 50 m)
Orientation: SE (toward the river)
Location: Side SE of the site. This rock is located on a steep hillside.
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: This is only one petroglyph representing an antropomorph with circular head and rays emanating from it. The figure holds objects with each hand (possibly a staff with the left hand).

Rock 2

Approximate size of the decorated area: 75 x 45 cm
Orientation: W (facing the river)
Location: SE side of the site, close to Rock 1.
Technique: pecked and scratched
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: This petroglyph represents a zoomorph (possibly a camelid) facing the right.

Rock 3

Approximate size of the decorated area: 53 x 48 cm
Orientation: The petroglyph is in the upper part of the rock
Location: SE side of the site. This rock is near the path which crosses the site. The rock is located at a higher elevation than Rock 2 and it is a boulder that has broken into several pieces.
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: The petroglyph consists of several parallel lines. These lines measure between 1 and 2 cm in width.

Rock 4

Approximate size of the decorated area: 62 x 36 cm
Orientation: S (toward the river)
Location: SE side of the site. Near Rock 3 and the path
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There is only one petroglyph. It represents a zoomorph (possibly a camelid) with a large neck facing toward the right.

Rock 5

Approximate size of the decorated area: 42 x 42 cm
Orientation: W
Location: SE side of the site, close to rocks 3 and 4 and near the path that crosses the site.
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: The design consists of mostly parallel lines and a central oval form.

Rock 6

Approximate size of the decorated area: 20 x 10 cm
Orientation: SE
Location: SE side of the site. This rock is close to the path, toward north of Rock 5.
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: Unfortunately the rock surface has broken and the design is not complete, although it seems to represent a zoomorph.

Rock 7

Approximate size of the boulder: 1.30 x 1.40 x 0.70 m (two decorated areas of 40 x 50 cm and 30 x 35 cm).
Orientation: W and S
Location: NW side of the site. It is located on the outlying areas of a rock grouping, near the path leading to the SE sector of the site.
Technique: pecked
Conservation: some damage to poor
Causes of deterioration: natural causes
Iconography and Composition: Toward the W there is a drawing which seems to be a composite figure with anthropomorphic and bird traits. Toward the S side there is a central design with some rays emerging from it.

Rock 8

Approximate size of the decorated area: 76 x 86 cm
Orientation: S
Location: NW side of the site. This rock is the upper part of the hill, above Rock 7.
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: Toward the left there is an antropomorph. At the center there is a serpentine form. Toward the right there are a series of lines which form something which looks a star or a flower.

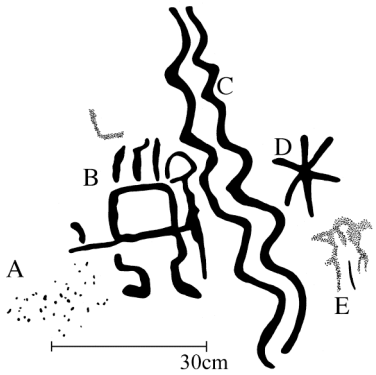


Figure A 35: Rock 5, X08 (drawing: Ana Nieves)

Rock 9

Approximate size of the decorated area: 1.25 x 0.80 cm
Orientation: The petroglyph is in the upper part of the rock
Location: NW side of the site. It is in the upper part of the hill near Rock 8
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: This is an antropomorph holding a staff and serpentine forms on the side.

Figure A 36: Rock 9, X05 (drawing: Ana Nieves)

Rock 10

Approximate size of the decorated area: 39 x 88 cm
Orientation: S
Location: NW side of the site. This rock is at 20 m to the north of Rock 9.
Technique: pecked, scratched
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: The petroglyph consists of several vertical and horizontal lines of different sizes.

X06

Coordinates: S 14º 48' 01" W 75º 12' 25"
IGN Map: Edition 1TPC Series J731 Sheet 1841II
UTM Coordinates: 777 638
There was not enough evidence to argue that this was an actual site or if the marks on the boulder at this location were caused by natural causes.

X07

Coordinates: S 14º 48' 50" W 75º 12' 28"
IGN Map: Edition 1TPC Series J731 Sheet 1841II
UTM Coordinates: 776 641
There was not enough evidence to argue that this was an actual site or if the marks on the boulder at this location were caused by natural causes.

X08

Coordinates: 14º 47' 49" W 75º 12' 49"
IGN Map: Edition 1TPC Series J731 Sheet 1841II
UTM Coordinates: 779 641
Location: This site is located in the southernmost of the *quebradas* which ends in Proulx's RN-39, where there is currently a house and a small barn. In this *quebrada* there are several peculiar shapes of stones but none of these rocks has petroglyphs except in site X08.
Numbering: There is only one panel with petroglyphs.
Documentation Methods: These petroglyphs were not traced and unfortunately the photos were damaged when they were developed.
Associated Ceramics: There was only one sherd at the site (early Nasca)
Periods: Unknown. Tentatively Early Nasca, although one sherd is not enough for a definite attribution to this culture.
Documented by: Ana Nieves, Joseph Uribe
Date: June 16
Description of the rock art:

Rock 1

Approximate size of the boulder's decorated side: 3.80 x 2.00 m
Orientation: W
Location: It is located in the upper part of a small *quebrada* imside the larger *quebrada* which leads to Proulx's RN-39.
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: This stone can be divided into in three parts. One portion has a redish color in its surface (natural). To the left there is an antropomorph. The central part has some figures but these are badly damaged. To the right is another antropomorph. The stone surface is very badly damaged so the figures are difficult to discern.

X09

Coordinates: S 14º 45' 44" W 75º 14' 09"
IGN Map: Edition 1-TPC Series J731 Sheet 1841I
UTM Coordinates: 746 679
Location: This site is at the SW side of the Nasca Valley, on the otehr side of the river from Proulx's RN-24.
Numbering: There is only one boulder with rock art.
Documentation Methods: The design was traced and photographed.
Associated Ceramics: No sherds were found in this area.
Periods: Undetermined
Documented by: Ana Nieves, Leo Rojas
Date: June 17, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 1.80 x 1.50 x 1.50 m
Orientation: N (toward the river)
Location: There are several rolled boulders at the bottom of a small *quebrada* but only one has petroglyphs.
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are two zoomorphs, one of which is definitely a feline with an extension that seems to be a tongue (similar to the felines of Site X02). At one side of this feline there is a rayed motif (it looks like a sun).

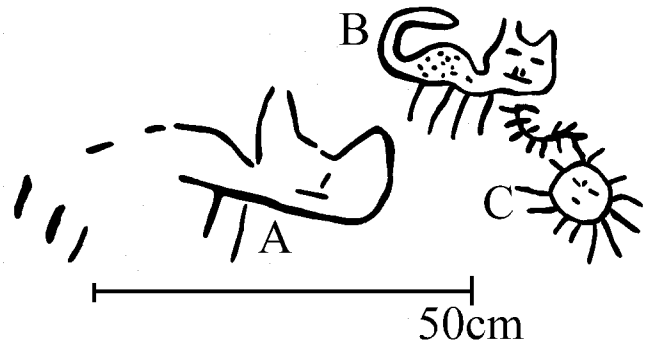


Figure A 37: Rock 1, X09 (drawing: Ana Nieves)

X10

Coordinates: S 14º 45' 51" W 75º 14' 04"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 747 677
Location: This site is located at the SW side of Nasca Valley, on the other side of Quebrada Majuelos
Numbering: There is only one rock and it is in bad condition
Documentation Methods: This rock was not traced
Associated Ceramics: No diagnostic sherds were found in this area.
Periods: Undetermined
Documented by: Ana Nieves, Leo Rojas
Date: June 17, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 2.00 x 1.00 x 1.50 m
Orientation: W
Location: The boulder is located in one of the hills in front of *Quebrada* Majuelos. The drawing is in the part of the boulder.
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: The lower portion of the rock has parts of an anthropomorph, namely its oval head and lines that indicate a body.

X11

Coordinates: S 14º 45' 37" W 75º 14' 43"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 736 682
Location: This area is located downriver from sites X09 and X10, inside a *quebrada* on the SW side of the valley. There is a group of big rocks, two of which have petroglyphs.
Numbering: The rocks were numbered 1 and 2.

Documentation Methods: The petroglyphs were not traced.
Associated Ceramics: No ceramics were found.
Periods: Undetermined
Documented by: Ana Nieves, Joseph Uribe
Date: June 19, 2000
Description of the rock art:

Rock 1

Approximate size of the decorated area: 60 x 95 cm
Orientation: E
Location: It is located in the bottom of the *quebrada*.
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: Two horizontal lines and two vertical lines are crossed almost perpendicularly (like a tic-tac-toe).

Rock 2

Approximate size of the boulder's decorated side: 90 x 53 cm
Orientation: W
Location: 5 m from Rock 1
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: There are several curved lines but it is difficult to determine what they represent. In the lower part of the rock there is a circle with a dot in the center which could be part of an antropomorph.

X12

Coordinates: S 14º 45' 20" W 75º 14' 17"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 743 687
Location: This area is located in the SW side of Rio the Nasca Valley. It is in a *quebrada* that which has big boulders in the upper part of the hills. These boudlers are visible from the other side of the valley and are clearly observed from the road that enters the valley near Jumana. The *quebrada* is also across the valley from RN-23. The boudlers containing petroglyphs are in is the lower part of the *quebrada* where there are many rolled boulders.
Numbering: Only one large rock had any petroglyphs.
Documentation Methods: The petroglyph was traced and photographed.
Associated Ceramics: There were no sherds in the immediate vecinity of the boulder, but we found Early Intermediate Period and Late Intermediate Period sheds closer to the entrance of the *quebrada*.

Periods: The iconography of this drawing indicates that it could be late Paracas
Documented by: Ana Nieves, Joseph Uribe
Date: June 19, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder's decorated side: 1.28 x 0.77 m
Orientation: N (toward the river)
Location: On the *quebrada* floor below a group of fallen rocks
Technique: pecked
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: It is a large anthropomorphic figure with a rectangular head. Its has round eyes and a smiling mouth. There is a triangular form on its forehead. The body of the human being is elongated and has parallel bands as well as a row of circular forms along the center. Along both sides of its body there are triangular forms. The design of the head is similar to Paracas Oculate Being representations, especially those found Ocucaje on painted textiles. However, the body is similar to some Nasca figures that also have bodies decorated with parallel bands (especially killer whales). On one side of the boulder is a representation of a vulva.

X13

Coordinates: S 14º 44' 16" W 75º 15' 01"
IGN Map: Edition 1-TPC Series J731 Sheet 1841IV
UTM Coordinates: 730 706
There was not enough evidence to argue that this was an actual site or if the marks on the boulder at this location were caused by natural causes.

X14

Coordinates: S 14º 44' 01" W 75º 15' 15"
IGN Map: Edition 1-TPC Series J731 Sheet 1841IV
UTM Coordinates: 726 711
Location: This site is located inside a *quebrada* which takes to the W side of the Nasca Valley. It is downriver from Proulx's RN-3 and across from Proulx's RN-4. Here there are several rolled boudlers of which only one has rock art. The condition of the petroglyphs is poor.
Numbering: There is only one boulder.
Documentation Methods: The boulder was photographed but only the petroglyphs which were in better condition were traced.
Associated Ceramics: There were thick, undecorated sherds at the site (similar to the ones in Proulx's site RN-51)
Periods: Undetermined
Documented by: Ana Nieves, Vitaliano Flores Cusi

Date: June 22, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 1.50 x 1.80 x 1.80 m
Orientation: E
Location: It is located at the base of the *quebrada*.
Technique: pecked
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: There are four clear antropomorphs with clearly indicated navels. One of them is much larger than the rest. Besides these there are rectangular shapes. There could be more shapes but the rock surface is very damaged.

X15

Coordinates: S 14º 43' 27" W 75º 14' 47"
IGN Map: Edition 1-TPC, Series J731, Sheet 1841I
UTM Coordinates: 733 721
Location: This site is located at the E side of the Nasca Valley. It is the first big *quebrada* downriver from the road to Jumana. At approximately 100 meters from the entrance of the *quebrada* there are several rolled boulders, one of which is carved.
Numbering: There is only one rock
Documentation Methods: It was not traced, only photographed.
Associated Ceramics: No ceramics were found
Periods: Undetermined
Documented by: Ana Nieves, Cuqui Nieves, Vitaliano Flores Cusi
Date: June 24, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder's decorated side: 0.94 x 1.00 m
Orientation: Upper part of the rock
Location: This rock is located in the base of the *quebrada*
Technique: pecked or carved
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: The rock is damaged in several areas and therefore the petroglyph seems to be incomplete. It consists of deep lines or "channels".

X16

Coordinates: S 14º 42' 21" W 75º 16' 16"
IGN Map: Edition 1-TPC Series J731 Sheet 1841IV
UTM Coordinates: 708 741

Location: There are far less rolled boulders downriver from site X15. This is one of the first areas with rolled boulders. The site is located in a narrow *quebrada* which ends at a cliff on the E side of the Nssca Valley. Rock 2 is next to the cliff itself while Rock 1 is further into a *quebrada*. The *quebrada* is not visible from the river.
Numbering: There are two boulders, 1 and 2.
Documentation Methods: Both rocks were traced and photographed
Associated Ceramics: No diagnostic shers were found in this area.
Periods: Undetermined
Documented by: Ana Nieves, Julio César Cortés
Date: June 29, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder's decorated side: 53 x 70 cm
Orientation: S (toward the river)
Location: Inside the *quebrada* (it is near a path which leads to Rio Grande)
Technique: pecked or carved
Conservation: poor (broken)
Causes of deterioration: natural causes
Iconography and Composition: There are several marks. Unfortunately part of the rock is chipping off. It seems to be an antropomorph with a necklace.

Rock 2

Approximate size of the boulder's decorated side: 1.28 x 0.70 m
Orientation: Up (top of boulder). One line continues downward in the SE side (toward the river).
Location: This rock is located on the edge of the cliff neat the end of the *quebrada* where Rock 1 is.
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: The surface of the rock is covered with deep "channels" of different types. There is a straight line which continues to the side of the boulder towards the river. There is also a zig zag line. At the edge of the stone there are also a series of lines and dots.

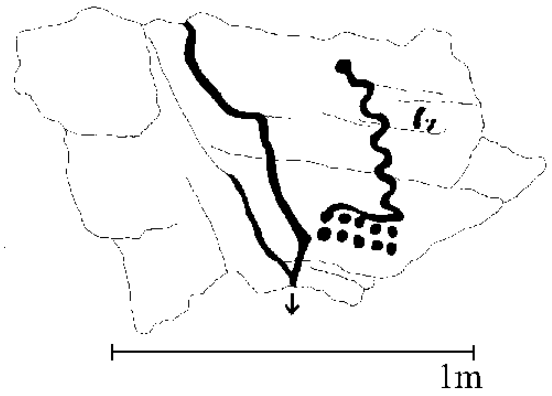


Figure A 38: Rock 2, X16 (drawing: Ana Nieves)

X17

Coordinates: S 14º 42' 17" W 75º 16' 23"
IGN Map: Edition 1-TPC Series J 731 Sheet 1841IV
UTM Coordinates: 706 742
Location: This site is located in a small *quebrada* that leads to a small cliff on the E side of the valley. There are several exposed rock strata on the hillside. One of them has a bold petroglyph that may be seen at a distance. Between sites X16 and X17 there is a small cemetery with Nasca remains (it is not in Proulx's survey).
Numbering: There are only two rocks (1 and 2).
Documentation Methods: They were only photographed.
Associated Ceramics: There were no sherds in the area.
Periods: Undetermined
Documented by: Ana Nieves, Julio César Cortés
Date: June 30, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder's decorated side: 2.85 x 1.35 m
Orientation: Up (top of rock)
Location: The rock is at one of the sides of the *quebrada*, on the hillside, where there are large areas of exposed rocks.
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: At the left side there is a motif made with wide lines. It consists in one straight line that bifurcates and has a circular shape around it. Towards the right there are pecked areas.

Figure A 39: Rock 1, X17 (drawing: Ana Nieves)

Rock 2

Approximate size of the boulder's decorated area: 15 x 53 cm (the area of esxposed rock is rather large, though)
Orientation: inclined to the south
Location: Below Rock 1.
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: It consists of two crossing, curved lines.

X18

Coordinates: S 14º 42' 21" W 75º 16' 28"
IGN Map: Edition 1-TPC Series J731 Sheet 1841IV
UTM Coordinates: 704 741
Location: This site is located above a small cliff. From the river one can clearly see three isolated boulders (two large ones close together, and a smaller one at some distance at some distance)
Numbering: These rocks were numbered 1 to 3.
Documentation Methods: They were only photographed.
Associated Ceramics: There were no diagnostic sherds in this area. There were some looting holes but only with a few sherds of utilitarian ceramics.
Periods: Undetermined
Documented by: Ana Nieves, Julio César Cortés
Date: June 30, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 1.00 x 0.92 x 0.90 m

Orientation: S, W, N and NE
Location: This rock and Rock 2 are together, approximately 20 meters from the cliff, and both are visible from the river.
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: S Side: Several wide lines that start on top of the boulder. Three of these lines continue on the S side. These are groove or "channel" petroglyphs. W Side: On this side there are several vertical zig zag grooves. They are in poor condition. N Side: The rock is broken on this side. However, portions of horizontal grooves are still visble. NE Side: Here there are three grooves that cross.

Rock 2

Approximate size of the boulder: 1.10 x 0.90 x 0.45 m
Orientation: E
Location: Next to Rock 1.
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are three grooves of the same kind as the ones that decorate Rock 1. They are vertical.

Rock 3

Approximate size of the boulder: 0.77 x 0.80 x 0.40 m
Orientation: Up (top of rock)
Location: To the NE of Rocks 1 and 2.
Technique: pecked or carved
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: There is a zig zag. (There are other marks in the rock which can not very clear due to their poor condition,)

X19

Coordinates: S 14º 42' 11" W 75º 16' 41"
IGN Map: Edition 1-TPC Series J731 Sheet 1841IV
UTM Coordinates: 701 744
Location: This site is located in a narrow *quebrada* on the E side of the Nasca Valley, across Proulx's RN-8. The *quebrada* of sites X19 and X20 ends close to a small Nasca cemetery where we found large *batan* (grinding stone).
Numbering: Boulders were numbered from 1 to 4.
Documentation Methods: All the rocks were photographed but only Rocks 2 and 4 were traced.
Associated Ceramics: No sherds were found in this area.

Periods: Undetermined
Documented by: Ana Nieves, Julio César Cortés, Raul Nieves, Cuqui Nieves
Date: June 30 and July 3, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 1.20 x 2.0 x 1.30 m
Orientation: W and Up (top of rock)
Location: It is located at the left side of the *quebrada* as one faces downstream.
Technique: pecked or carved
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: In the upper part of the boulder there is a large antrhopomorph. It has circular eyes and lines descend from them. The body is long and rectangular. It seems to have an arm. Unfortunately the surface of this petroglyph is in poor condition and the figure is not very clear. In the W side there is a small zoomorph.

Rock 2

Approximate size of the boulder: 1.00 x 1.10 x 0.90 m
Orientation: SE, NE and Up (top of boulder)
Location: 5 m from Rock 1, towards the NE
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: On top of the boulder there is an elongated figure, perhaps an antropomorph. On the S side there is a zoomorph facing right. On the NE side there are another zoomorph also facing the right side

Rock 3

Approximate size of the boulder: 1.00 x 2.20 x 0.60 m
Orientation: Up (top of boulder)
Location: 9 m from Rock 2, inside of the *quebrada*.
Technique: pecked or carved
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: There is an area with circles and a pecked area but in poor condition.

Rock 4

Approximate size of the boulder's decorated side: 42 x 55 cm
Orientation: inclined towards S
Location: It is located in the upper portion of the hillside within the *quebrada*, downstream from rocks 1 and 3.

Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: Once again this petroglyph is made with grooves or "channels". Two lines merge to form the shape of a "V" and become one single line. At the middle of the line it turns into a circle and then again becomes a single line.

X20

Coordinates: S 14º 42' 06" W 75º 16' 35"
IGN Map: Edition 1-TPC Series J731 Sheet 1841IV
UTM Coordinates: 702 745
Location: This site is located in a place where several small *quebradas* join. One can get to this site following by walking "upstream" in *quebrada* of site X19. At the bottom of a hill there are several fallen rocks and one of them is carved. There is a path running through this area. This is a very wide path that connects both valleys.
Numbering: There is only one decorated rock.
Documentation Methods: The rock was photographed
Associated Ceramics: No ceramic sherds were found in this area.
Periods: Undetermined
Documented by: Ana Nieves, Julio César Cortés
Date: June 30, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 0.90 x 1.73 x 1.15 m
Orientation: There are carvings on all sides.
Location: It is located in the lower part of the hill, close to a wide path.
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: All the sides have round carvings of several sizes as well as channels. On the NE side there are a series of wide, circular depressions. A series of vertical grooves descend from these circular depression to the ground.

X21

Coordinates: S 14º 41' 57" W 75º 16' 45"
IGN Map: Edition 1-TPC Series J731 Sheet 1841IV
UTM Coordinates: 699 748
Location: This site is located in the upper part of a *quebrada* where there are many rolled boulders. The path that crosses X20 continues to X21 and crosses this site between some of the petroglyph-covered boulders. This is the greatest concentration of grooves or channels and cup petroglyps in this area.
Numbering: The rocks were numbered from 1 to 22

Documentation Methods: They were simply photographed
Associated Ceramics: Pieces of Nasca sherds were found in this site,
Periods: At least one: Early Intermediate Period
Documented by: Ana Nieves, Julio César Cortés, Raul Nieves, Cuqui Nieves
Date: July 3, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 1.70 x 1.30 x 0.90 m
Orientation: S. N
Location: Easternmost section of the site, at a higher elevation than the rest of the boulders.
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: S Side: Several dots and zig zags. N Side: Two rows of dots. On the top: Two zig zags.

Rock 2

Approximate size of the boulder: 0.65 x 0.85 x 0.55 m
Orientation: Up (top of the rock)
Location: 5 m to theW of Rock 1
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: There are two parallel lines that end at an edge. They are linked at one end by small lines

Rock 3

Approximate size of the boulder: 1.05 x 0.82 x 0.70 m
Orientation: E, N, SE
Location: It is located directly to the SW of Rock 2, next to Rock 4
Technique: pecked or carved, scratched
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: E side: Two vertical lines. SE side: Carved square. S side: circles (cups) and lines. N Side: Two lines

Rock 4

Approximate size of the boulder: 0.90 x 0.60 x 0.35 m
Orientation: Up (top, inclined to the E)
Location: Next to Rock 3, to the east
Technique: pecked or carved

Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: Circular carvings (cups)

Rock 5

Approximate size of the boulder: 0.68 x 0.90 x 0.46 m
Orientation: Inclined towards the S
Location: Directly to the SW of Rock 4
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: Circular carving (cups)

Rock 6

Approximate size of the boulder: 0.90 x 0.85 x 0.30 m
Orientation: Inclined towards the S
Location: Directly to the W of Rock 5
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: There is a curved line and a zigzag. Both lines form grooves or "channels" which join near the edge of the rock. At the right side there is a small antropomorph and a square. There are also circular carvings (cups) on the uppermost portion of the boulder.

Rock 7

Approximate size of the boulder: 0.98 x 0.85 x 0.45 m
Orientation: Inclined towards the S
Location: Directly to NE of Rock 6
Technique: pecked, scratched
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: Several fine and thin lines

Rock 8

Approximate size of the boulder: 1.55 x 0.55 x 0.50 m
Orientation: Inclined to towards the S
Location: It is located to the north of Rock 6 (it is a long, diamond shaped boulder)
Technique: pecked or carved, scratched
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are several zigzags and thin lines carved along the length of the decorated side.

Rock 9

Approximate size of the boulder: 1.15 x 0.55 x 0.75 m
Orientation: Up (top of the rock) and S
Location: Next to Rock 8 (towards the W)
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are several lines on top of the boulder. To the S side there are curved lines and circles.

Rock 10

Approximate size of the boulder: 1.60 x 1.20 x 0.80 m
Orientation: Up (top of the boulder)
Location: To the N of Rock 8
Technique: pecked or carved, scratched
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: There are curved and straight lines. There also is a "grid" motif. Some of the scratched marks were made before the wide carved lines.

Rock 11

Approximate size of the boulder: 1.30 x 0.90 x 0.50 m
Orientation: Inclined towards the S
Location: Next to Rock 10 (towards the W)
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: There is an anthropomorph at the left side, a zigzag to the right, then a line crossed by smaller lines, and finally a bigger zigzag.

Rock 12

Approximate size of the boulder: 0.77 x 0.80 x 0.85 m
Orientation: It is decorated on all sides
Location: To the S of Rocks 10 and 11
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: There are circles (circular depressions en all sides of this rock). Towards NE and SE there are vertical lines

Rock 13

Approximate size of the boulder: 1.65 x 0.75 x 1.00 m
Orientation: It is decorated in all sides

Location: Beside Rock 12 (towards E)
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: E side: zigzags. N side: vertical lines, a square and a circle. Top: several circular carvings (cups).

Rock 14

Approximate size of the boulder: 1.07 x 0.84 x 1.30 m
Orientation: S
Location: To the E of Rock 13
Technique: pecked or carved, scratched
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are two zigzags carved over several straight, scratched lines.

Rock 15

Approximate size of the boulder: 80 x 60 x 25 cm
Orientation: Inclined towards the S
Location: To the E of Rock 14
Technique: pecked or carved, scratched
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: There are several carved or scratched lines and a pecked or carved zigzag with a cup on the uppermost portion of it.

Rock 16

Approximate size of the boulder: 1.20 x 0.80 x 0.86 m
Orientation: SE
Location: To the SE of Rock 15
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: Two squares

Rock 17

Approximate size of the boulder: 1.62 x 1.22 x 1.86
Orientation: N
Location: To the N of Rock 16
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes

Iconography and Composition: Zigzags and straight lines

Rock 18

Approximate size of the boulder: 1.35 x 1.51 x 1.50 m
Orientation: W
Location: To the S of Rock 17
Technique: pecked or carved
Conservation: poor
Causes of deterioration: natural causes
Iconography and Composition: There are several pecked areas. Three big anthropomorphs with square heads and circular eyes are vaguely visible.

Rock 19

Approximate size of the boulder: 1.45 x 0.70 x 1.21 m
Orientation: Inclined towards the SW
Location: To the W of Rock 18
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: Carved lines form portions of two squares.

Rock 20

Approximate size of the boulder: 30 x 50 x 45 cm
Orientation: N
Location: To the south of Rock 19
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: One square and one circular shape

Rock 21

Approximate size of the boulder: 1.20 x 1.70 x 0.65 m
Orientation: All sides are decorated
Location: To the south of Rocks 1 through 20
Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: All sides have circular carvings (cups).

Rock 22

Approximate size of the boulder's decorated side: 86 x 63 x 63 cm
Orientation: Up (top), N and W
Location: Besides Rock 21

Technique: pecked or carved
Conservation: some damage
Causes of deterioration: natural causes
Iconography and Composition: circular carvings (cup)

X22

Coordinates: S 14º 41' 58" W 75º 16' 53"
IGN Map: Edition 1-TPC Series J731 Sheet 1841IV
UTM Coordinates: 697 748
Location: It is located in the same *quebrada* as Site X21 but closer to the river. There are several small rolled boulders in the base of the *quebrada*. The biggest boulder is the one which has a petroglyph.
Numbering: There is only one decorated rock.
Documentation Methods: It was not traced.
Associated Ceramics: No sherds were found.
Periods: Undetermined
Documented by: Ana Nieves, Julio Cesar Cortes, Raul Nieves, Cuqui Nieves
Date: July 3rd, 2000
Description of the rock art:

Rock 1

Approximate size of the boulder: 1.50 x 1.00 x 0.90 m
Orientation: S
Location: It is the biggest boulder on the side of the *quebrada*.
Technique: pecked or carved
Conservation: good
Causes of deterioration: natural causes
Iconography and Composition: One horizontal zigzag (very big). It covers almost all the surface of the rock.

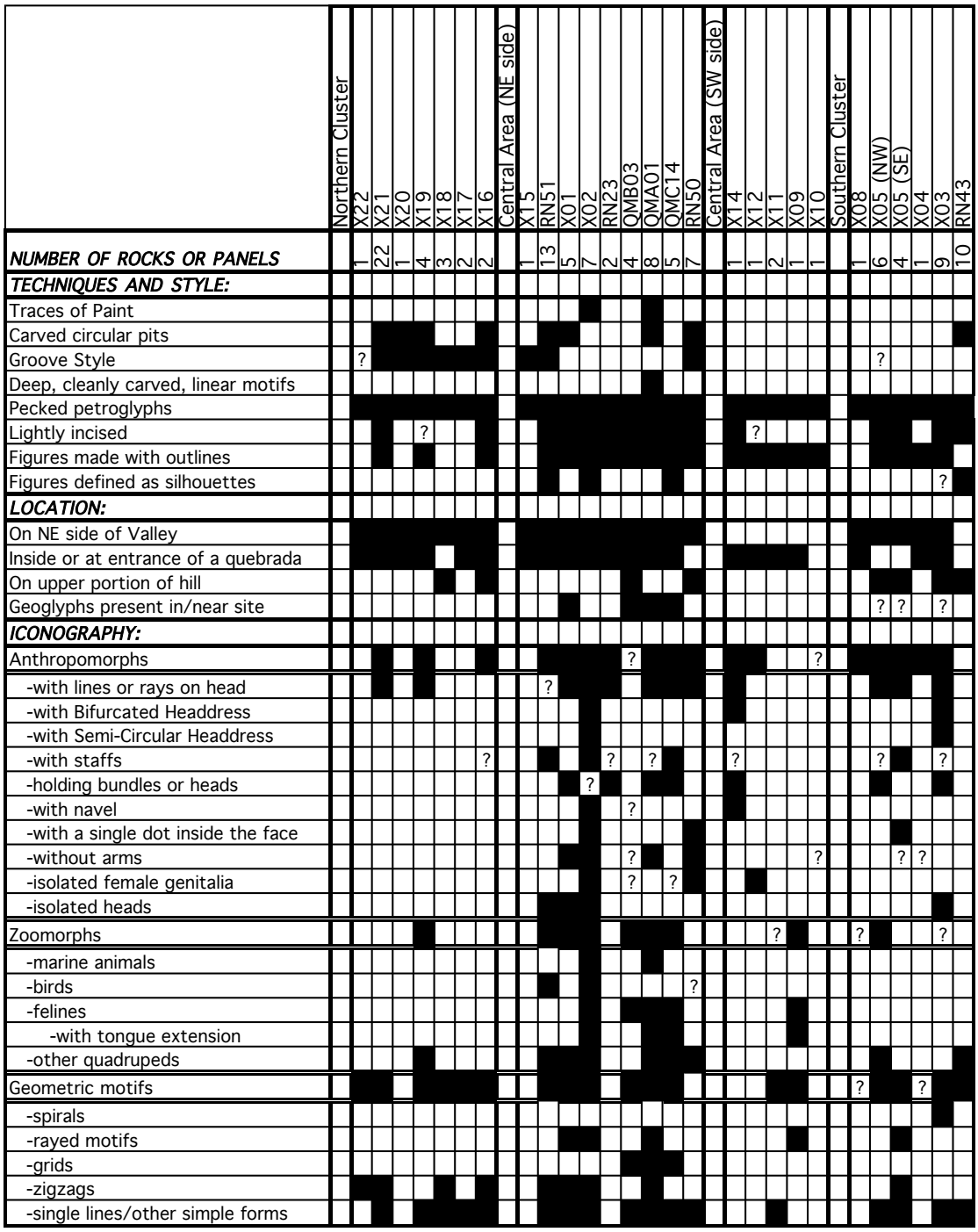


Figure A 40: Rock art characteristics in survey area

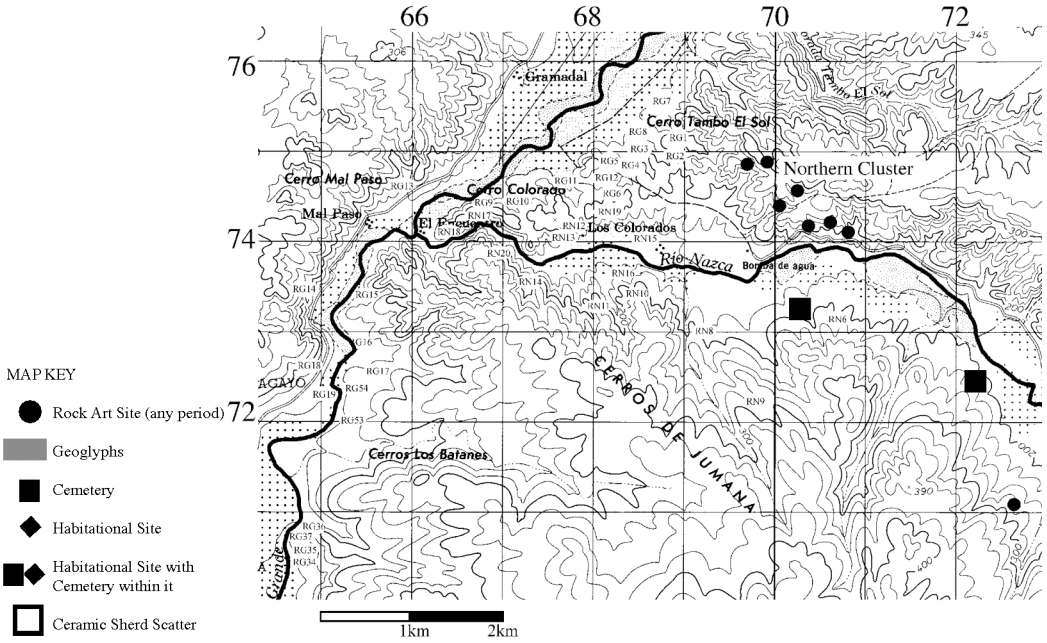


Figure A 41: Nothern Cluster sites and Early Horizon remains

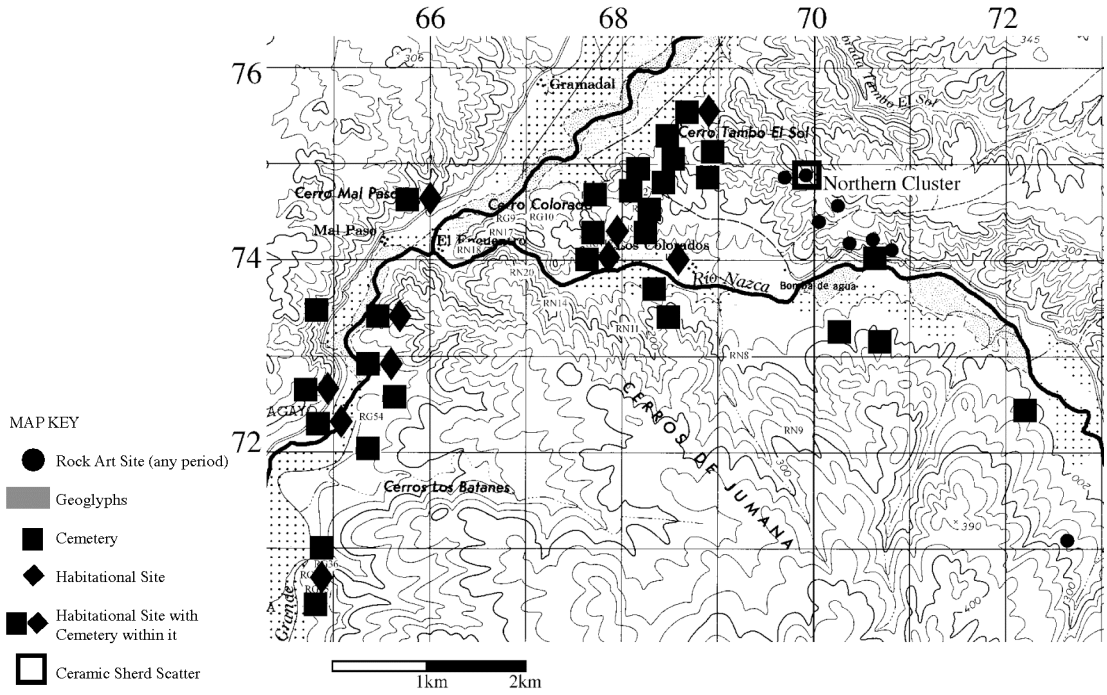


Figure A 42: Nothern Cluster sites and Early Intermediate Period remains

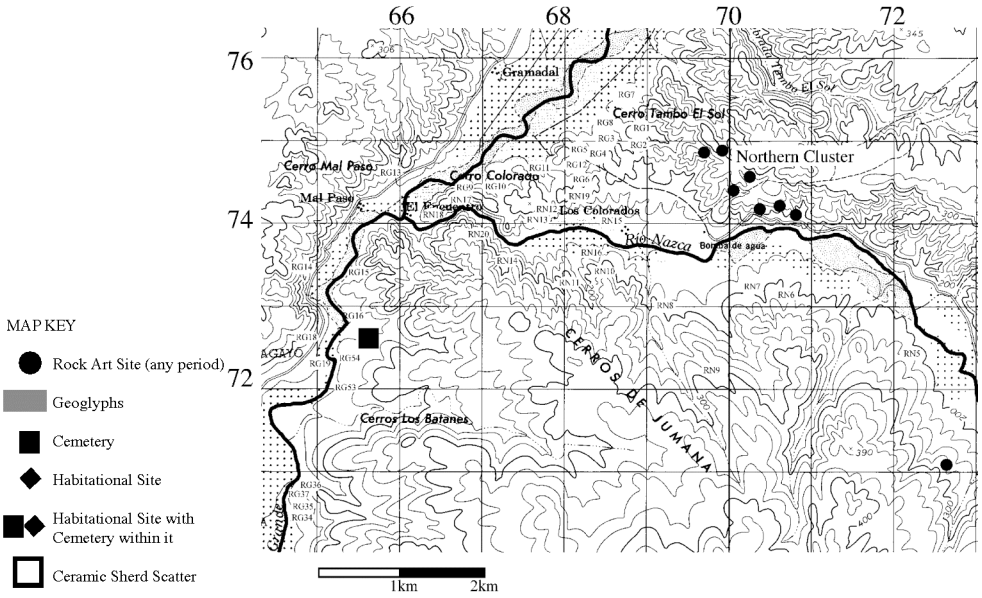


Figure A 43: Northern Cluster sites and Middle Horizon remains

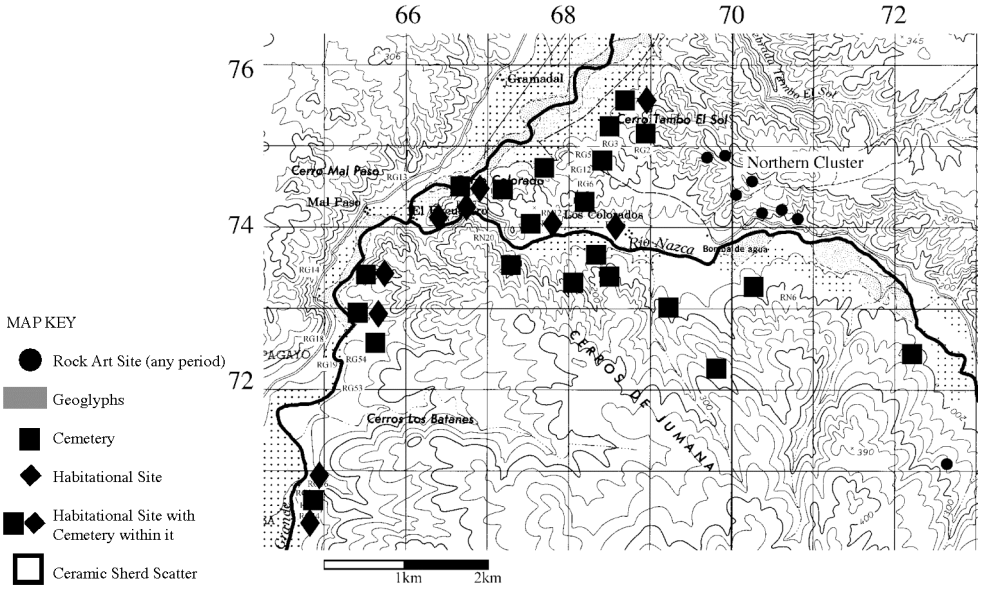


Figure A 44: Northern Cluster sites and Late Intermediate Period remains

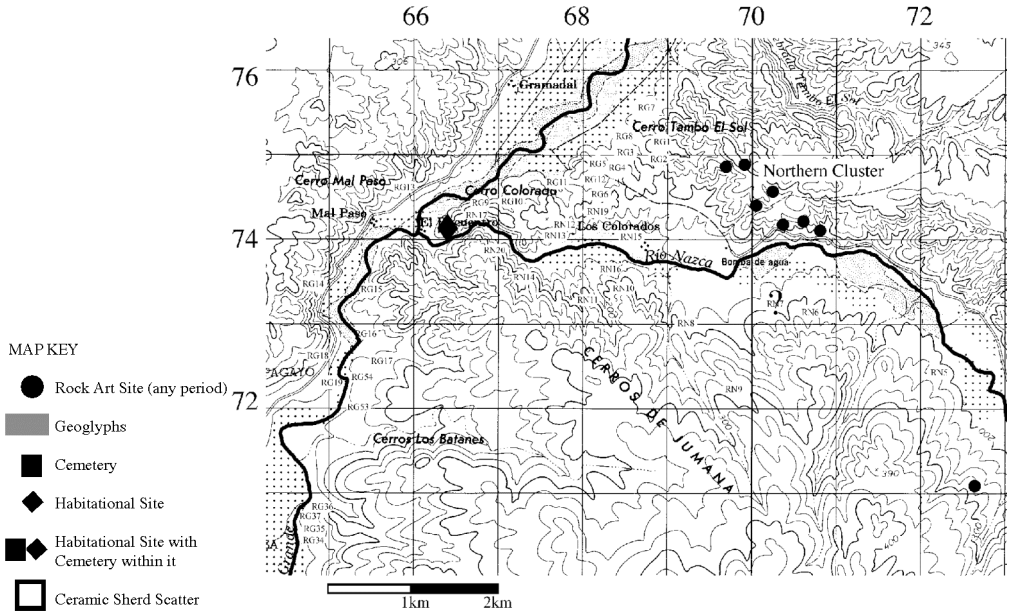


Figure A 45: Northern Cluster sites and Late Horizon remains

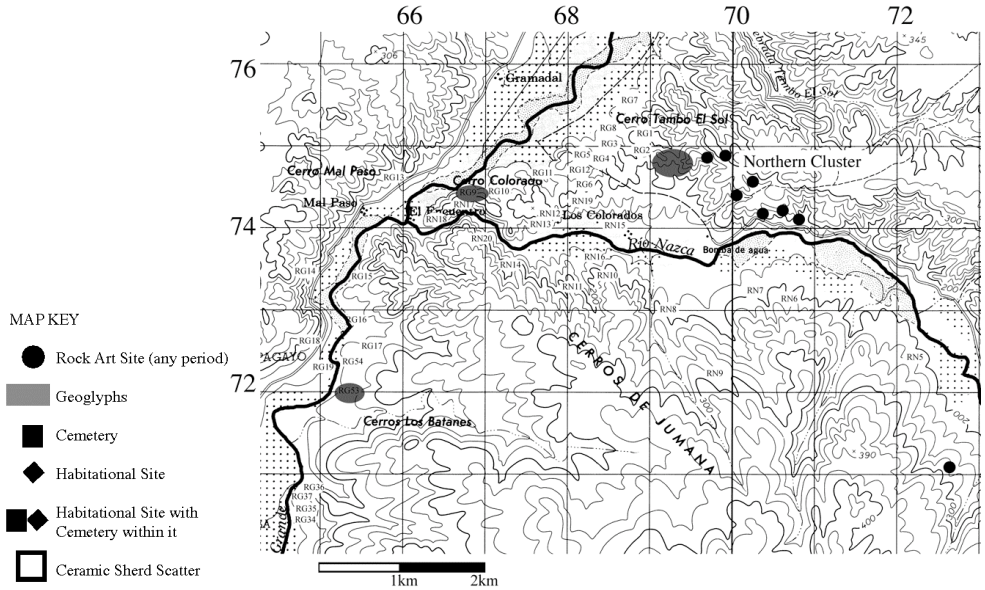


Figure A 46: Northern Cluster sites and geoglyphs

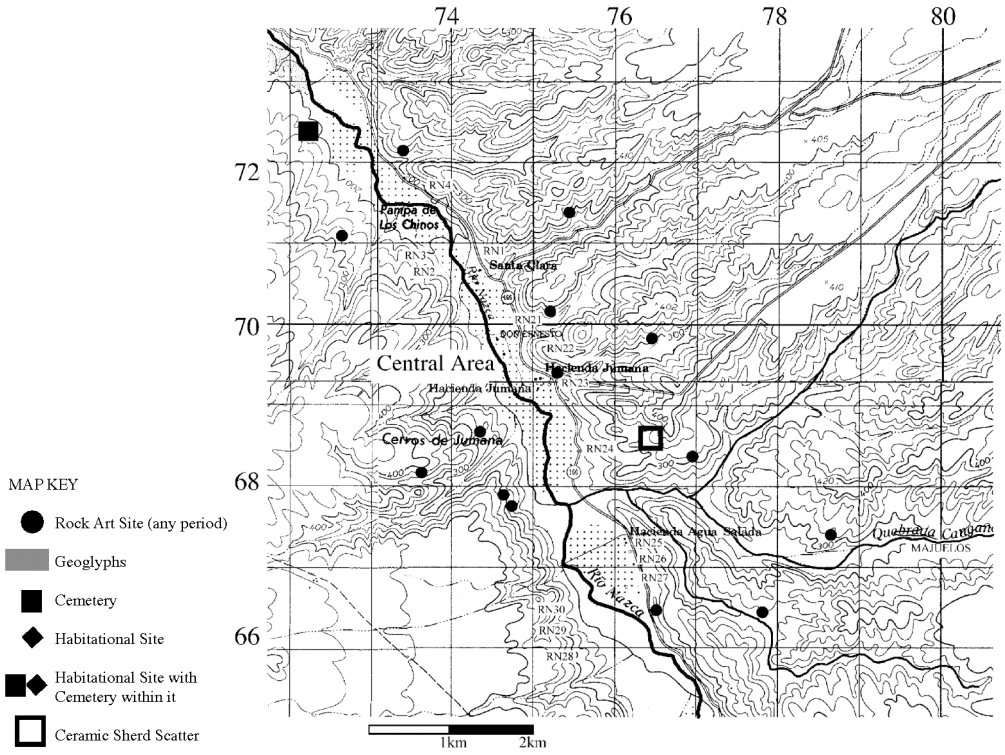


Figure A 47: Central Area and Early Horizon remains

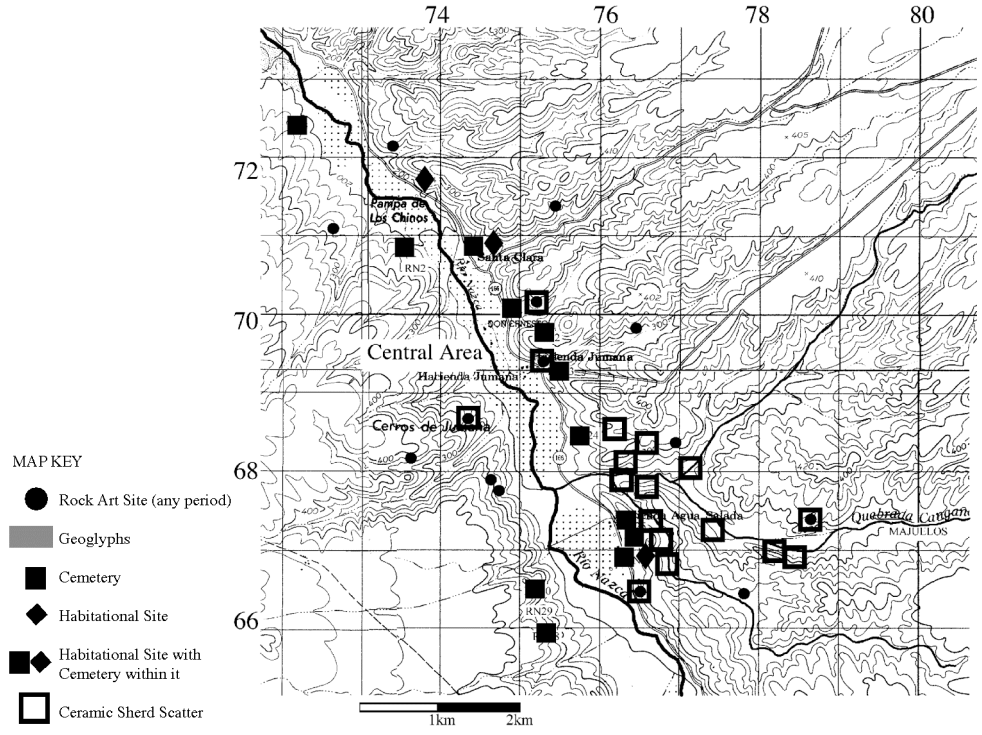


Figure A 48: Central Area and Early Intermediate Period remains

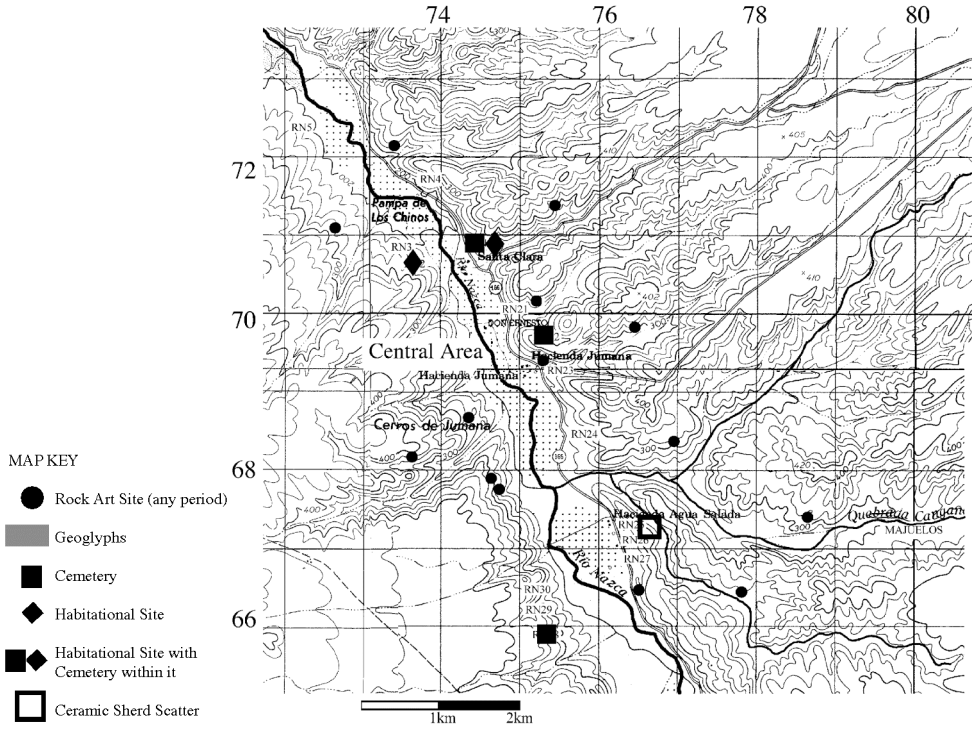


Figure A 49: Central Area and Middle Horizon remains

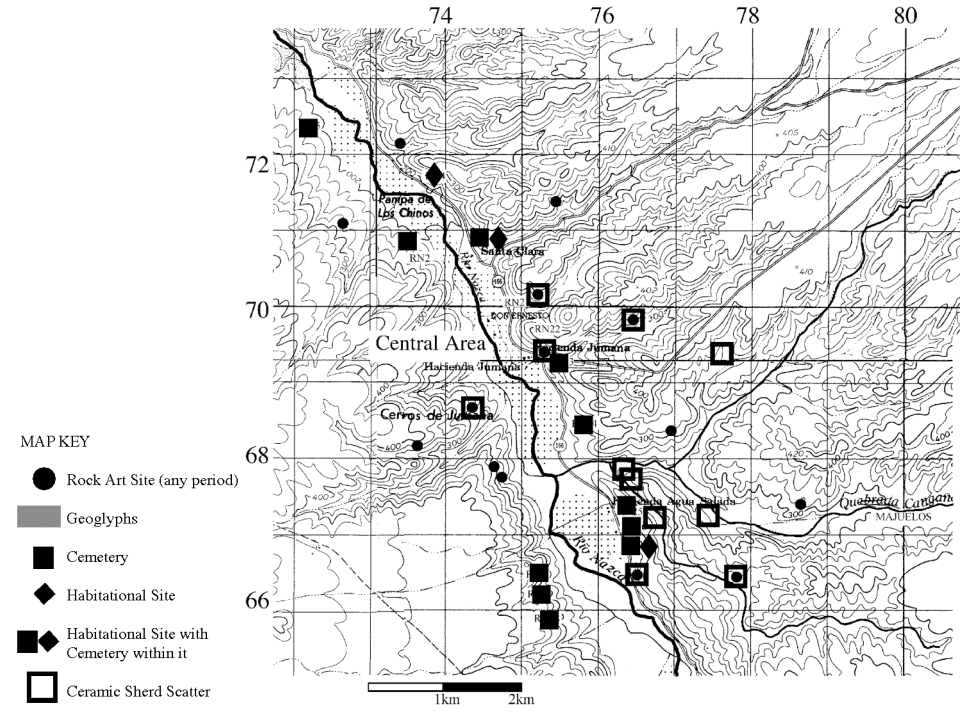


Figure A 50: Central Area and Late Intermediate Period remains

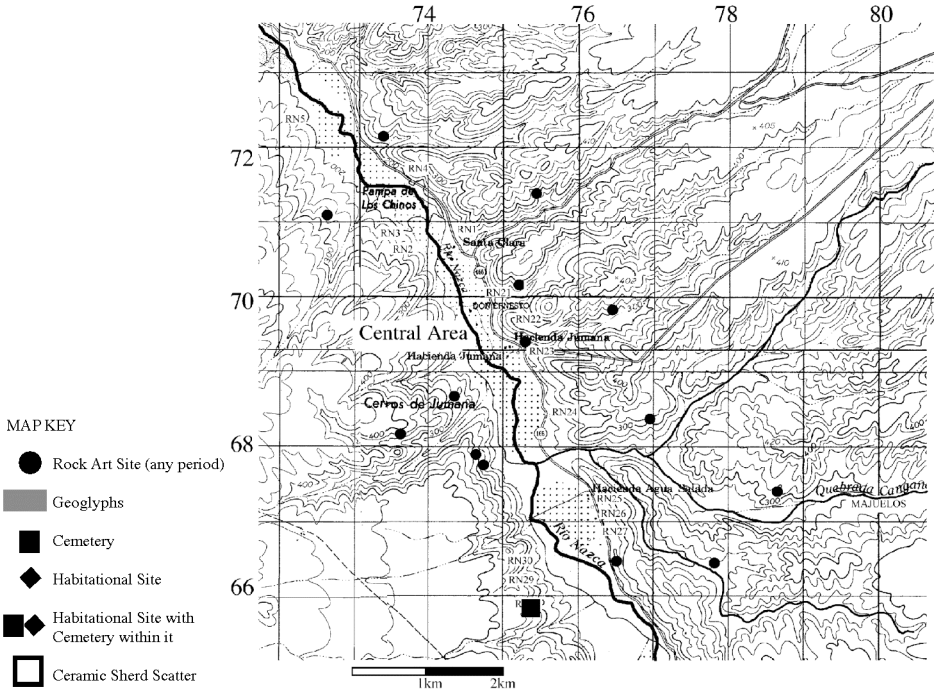


Figure A 51: Central Area and Late Horizon remains

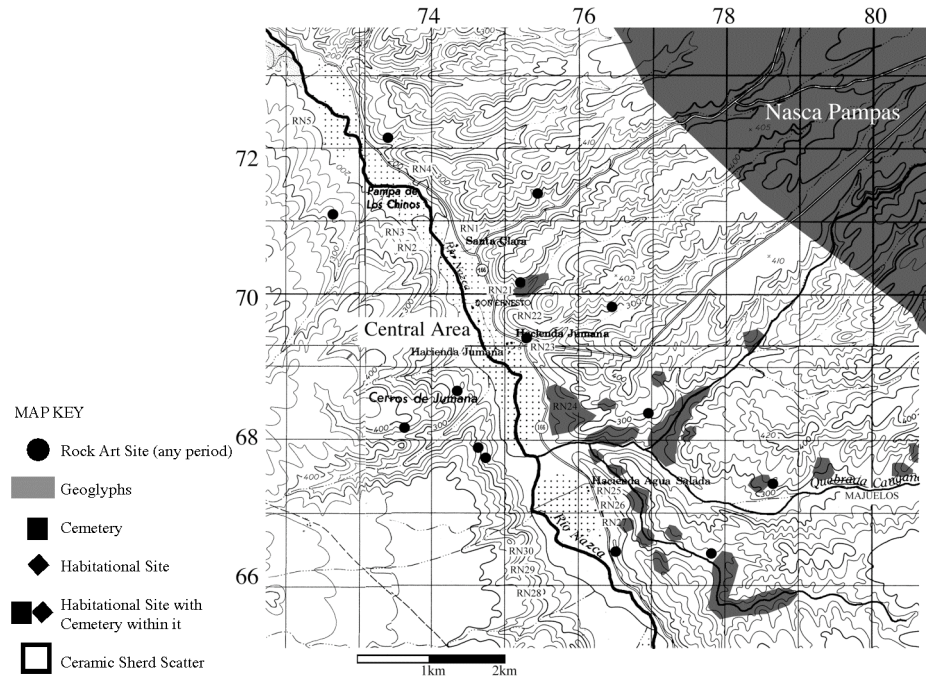


Figure A 52: Central Area and geoglyphs

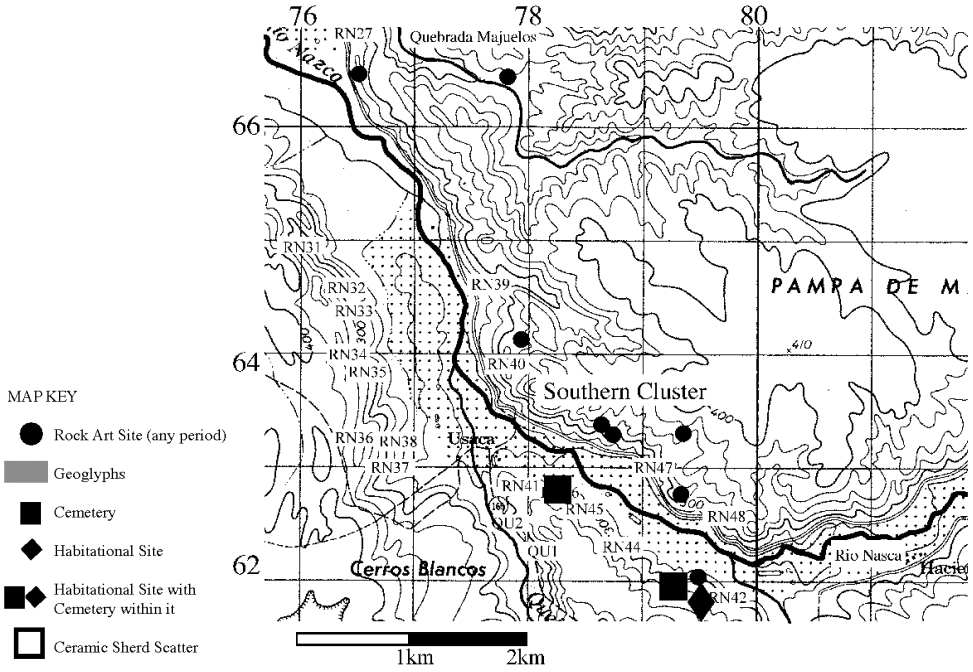


Figure A 53: Southern Cluster and Early Horizon remains

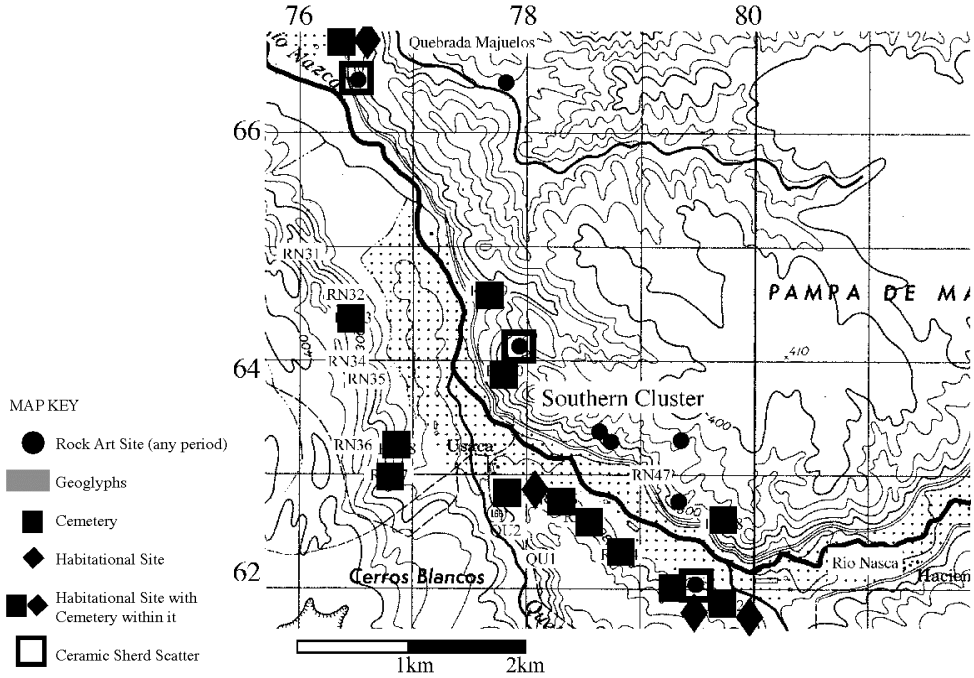


Figure A 54: Southern Cluster and Early Intermediate remains

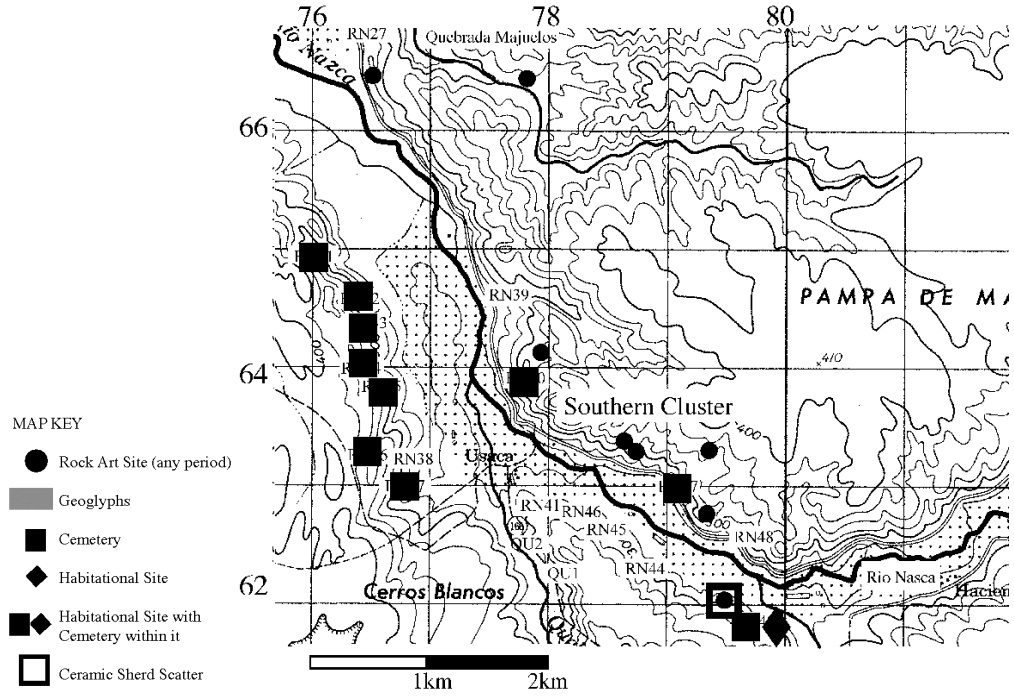


Figure A 55: Southern Cluster and Middle Horizon remains

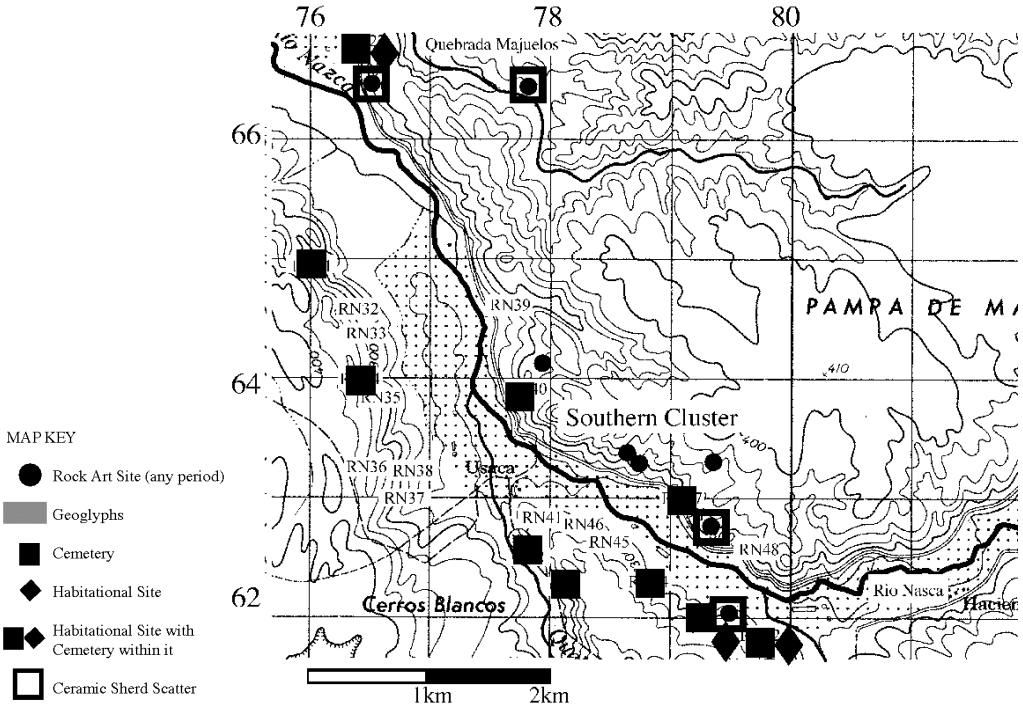


Figure A 56: Southern Cluster and Late Intermediate Period remains

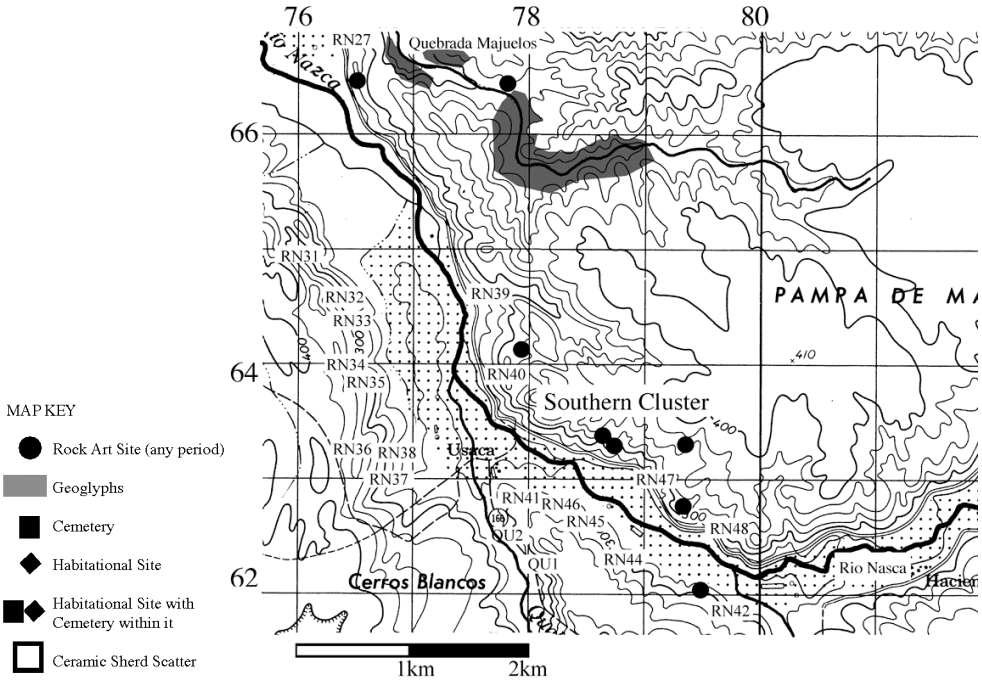


Figure A 57: Southern Cluster and geoglyphs

APPENDIX B : DESCRIPTION OF SITES IN QUEBRADA MAJUELOS

This survey complements Don Proulx's 1998 survey. At that time, Proulx primarily focused on the valley itself since the purpose of his survey was to document settlement patterns. Quebrada Majuelos was entered to document RN49, the site I call QMA01 here. Because Quebrada Majuelos consists of three large quebradas, I divided the area into Quebrada Majuelos A (the largest and widest of the quebradas), Quebrada Majuelos B (on the north) and Quebrada Majuelos C (to the south). Sites were named with the prefixes QMA-, QMB-, and QMC- accrording to their location.

All rock art sites were previously described in Appendix A.

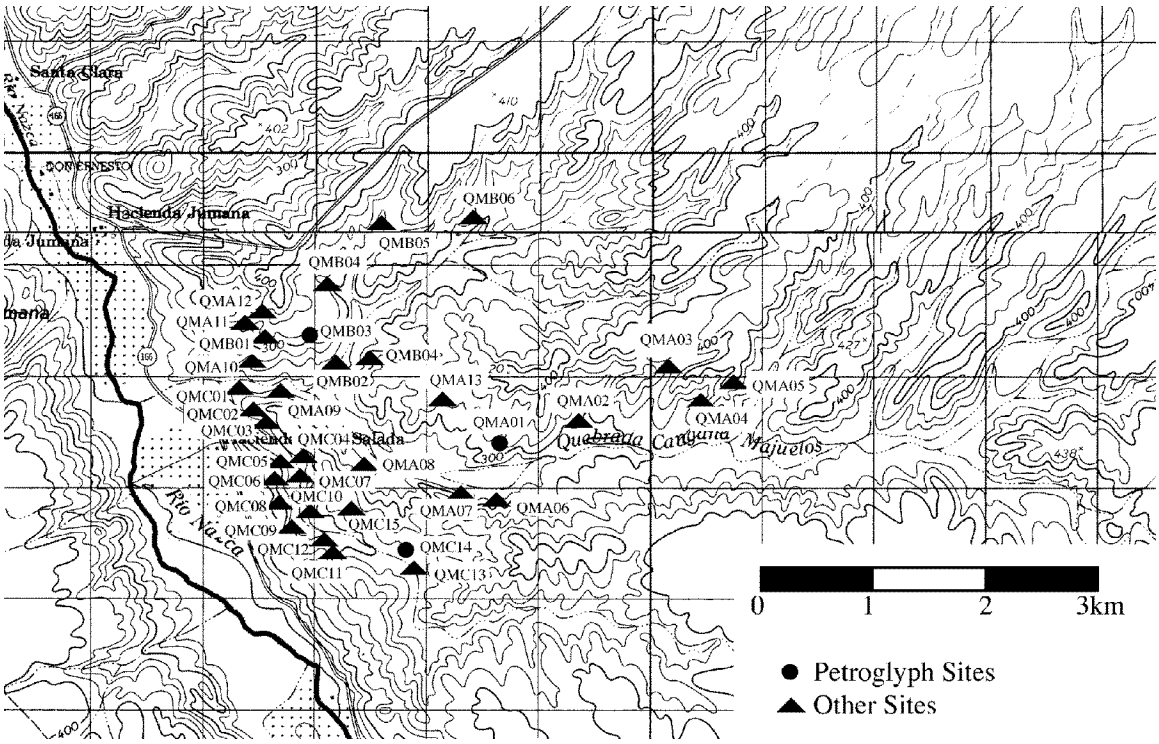


Figure B 1: Quebrada Majuelos sites

Site Inventory

Name	Description	Size	Period
QMA01 (RN49)	Petroglyphs Geoglyph Ceramic scatter	40 m long	Early Intermediate
QMA02	Geoglyphs	200x180m	undetermined
QMA03	Utilitarian Ceramics	50x30m	undetermined
QMA04	Geoglyph	7.5x3m	undetermined
QMA05	Geoglyphs	200x50m	undetermined
QMA06	Ceramic scatter	25x15m	Early Intermediate
QMA07	Ceramic scatter Geoglyph	50x50m	Early Intermediate
QMA08	Ceramic scatter	150x100m	Early Intermediate Late Intermediate
QMA09	Ceramic scatter	15x15m	At least: Early Intermediate
QMA10	Geoglyphs Ceramic scatter	350x50m	Early Intermediate
QMA11	Ceramic scatter	15x15m	At least: Early Intermediate
QMA12	Ceramic scatter	5x5m	Paracas
QMA13	Utilitarian ceramic	4x4m	undetermined
QMB01	Ceramic scatter	5x3m	At least: Early Intermediate
QMB02	Geoglyphs Utilitarian ceramics	750x250m	Early Intermediate

QMB03	Petroglyphs	3 m long	undetermined
QMB04	Geoglyphs	60x40m	undetermined
QMB05	Ceramic scatter	500x150m	Late Intermediate
QMB06	Geoglyph	31x9.30m	undetermined
QMB07	Geoglyph	100x20m	undetermined
QMC01	Ceramic scatter Geoglyphs	100x200m	Early Intermediate Late Intermediate
QMC02	Ceramic scatter	100m wide	Late Intermediate
QMC03	Geoglyph	30x15m	undetermined
QMC04	Geoglyphs	120x50m	undetermined
QMC05	Ceramic scatter	200x70m	Early Intermediate Middle Horizon
QMC06	Ceramic scatter	15x15m	Early Intermediate
QMC07	Geoglyph	200x10m	undtermined
QMC08	Stone mounds Ceramic scatter	60x90m	Early Intermediate
QMC09	Ceramic scatter	10x10m	undetermined
QMC10	Geoglyph	200x25m	undetermined
QMC11	Geoglyphs	15x3m	undetermined
QMC12	Geoglyphs	100x70m	undermined
QMC13	Geoglyphs	2000x200m	undetermined
QMC14	Petroglyphs	15x2m	Paracas
QMC15	Geoglyphs	100x50m	undetermined

QMA01 (RN49)

Description: PETROGLYPHS and GEOGLYPH. (See Appendix A)

QMA02

Location: West of QMA01, on the N side of Quebrada Majuelos.
Description: GEOGLYPHS. There are two pairs of lines with different orientations. The first pair of lines is 8 m apart, made by piling stones. The lines are approximately 180 m long and are oriented to the NE. One end of the geoglyph ends on the *quebrada*. The second geoglyph also consists of parallel lines, but it is damaged. It is oriented to the NW. Lines in this geoglyphs are 25 m apart and the longest one measures 98 m. No ceramics were found in the area.
Approximate Area: 200 x 180 m
Coordinates: S 14 º 45' 56" Wº 11' 30"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 793 676
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Edith Palomino Polanco, Alfredo Salas Diaz, Leonor Poma Armocanqui, Marianella Alvarado Casos, Leonardo Rojas Escadillo
Date: February 8 and 9, 2000

QMA03

Location: This site is located in the middle of a smaller *quebrada* to the NE of QMA01. The small *quebrada* leads to the *pampa*.
Description: CERAMIC SCATTER. In an area measuring about 50 x 30 cm there were remains of utilitarian pots about ½ cm thick. Some of the sherds were rather large (about 13 cm long).
Approximate Area: 50 x 30 m
Coordinates: S 14º 45' 43" W 75º 11' 05"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 801 680
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Edith Palomino Polanco, Alfredo Salas Diaz, Leonor Poma Armocanqui, Marianella Alvarado Casos, Leonardo Rojas Escadillo
Date: February 8 and 9, 2000

QMA04

Location: This site is located on the north side of Quebrada Majuelos. The geoglyph is on top of a hill.
Description: GEOGLYPH. Two straight lines made by piling stones. One of them is 7.5 m long. They are 3 m apart. There were no ceramic sherds in the area.
Approximate Area: 7.5 x 3 m

Coordinates: S 14º 45' 51" W 75º 10' 54"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 804 678
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Edith Palomino Polanco, Alfredo Salas Diaz, Leonor Poma Armocanqui, Marianella Alvarado Casos, Leonardo Rojas Escajadillo
Date: February 9 and 10, 2000

QMA05

Location: The geoglyphs are on a natural platform on the north side of the *quebrada*. The site is visible from QMA03.
Description: GEOGLYPHS. The largest geoglyph is is approximately 180.60 m long. It is a long trapezoid (19 m wide in the base and 13 m wide at the other end) oriented to the SW. There is a pile of stones at the wide end of the trapezoid. There are three parallel lines that run the length of the trapezoid. Each is approximately 42 cm wide. There is a smaller geoglyph west of this one. The smaller geoglyph is also a trapezoid, 46.60 m long, 4.60 m at the base and 3/10 m wide at the narrow end. It also has a pile of stones at the base. This geoglyph is oriented to the S. There are several other lines that cross these geoglyphs.
Approximate Area: 200 x 50 m
Coordinates: S 14º 45' 47" W 75º 10' 43"
IGN Map: Edition 1-TPC Series 731 Sheet 1841II
UTM Coordinates: 807 679
Cultural Periods: Undetermined. Only utilitarian sherds were found in the area.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Edith Palomino Polanco, Alfredo Salas Diaz, Leonor Poma Armocanqui, Marianella Alvarado Casos, Leonardo Rojas Escajadillo
Date: February 10, 2000

QMA06

Location: On the south side of Quebrada Majuelos, across from QMA01 (RN49)
Description: CERAMIC SCATTER. There were Nasca sherds in poor condition.
Approximate Area: 25 x 15 m
Coordinates: S 14º 46' 19" W 75º 11' 57"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 785 667
Cultural Periods: Early Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Edith Palomino Polanco, Alfredo Salas Diaz, Leonor Poma Armocanqui, Marianella Alvarado Casos, Leonardo Rojas Escajadillo
Date: February 11, 2000

QMA07

Location: West of QMA06, on a natural platform.
Description: CERAMIC SCATTER and GEOGLYPH. There are many sherds around a geoglyph that consists of a single curved line made by aligned stones.
Approximate Area: 50 x 50 m
Coordinates: S 14º 46' 17" W 75º 12' 05"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 783 669
Cultural Periods: Early Intermediate (proto, middle and late Nasca)
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Edith Palomino Polanco, Alfredo Salas Diaz, Leonor Poma Armocanqui, Marianella Alvarado Casos, Leonardo Rojas Escajadillo
Date: February 11, 2000

QMA08

Location: West of QMA07. Sherds start at the top of a hill and continue down the hillside.
Description: CERAMIC SCATTER. There were sherds of many periods. The geoglyphs from portion C of Quebrada Majuelos are clearly visible from this site.
Approximate Area: 150 X 100 m
Coordinates: S 14º 46' 08" W 75º 12' 33"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 775 672
Cultural Periods: Early Intermediate, Late Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Edith Paolomino Polanco, Alfredo Salas Diaz, Leonor Poma Armocanqui, Marianella Alvarado Casos, Leonardo Rojas Escadillo
Date: February 11, 2000

QMA09

Location: NW of QMA08, on the upper part of a hill.
Description: CERAMIC SCATTER. There are some diagnostic sherds and some utilitarian sherds. Although most were Nasca, one sherd had a triangular incision and could be earlier.
Approximate Area: 15 x 15 m
Coordinates: S 15º 45' 48" W 75º 13' 03"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 765 678
Cultural Periods: At least one: Early Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Sevallos, Aflredo Salas Diaz, Leonardo Rojas Escajadillo
Date: February 14, 2000

QMA10

Location: The site is close to the union of portions A and B of Quebrada Majuelos.
Description: GEOGLYPHS and CERAMIC SCATTER. This is primarily a geoglyph site. The geoglyphs are partially destroyed. The longest on runs parallel to Quebrada Mauelos A.
Approximate Area: 350x 50 m
Coordinates: S 14º 45' 39" W 75º 13' 06"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 764 681
Cultural Periods: Early Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Aflredo Salas Diaz, Leonardo Rojas Escajadillo
Date: February 15, 2000

QMA11

Location: The site is on the north side of Quebrada A of Quebrada Majuelos, close to the union with Quebrada B. It is on top of a hill.
Description: CERAMIC SCATTER. There are a lot of sherds in the area and possibly the remains of a geoglyph (mounds of stones).
Approximate Area: 15 x 15 m
Coordinates: S 14º 45' 28" W 75º 13' 07"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 764 685
Cultural Periods: At least one identifiable period: Early Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Cevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: February 15, 2000

QMA12

Location: The site is very close to QMA11, on the north side of Quebrada Majuelos A, close to its union with Quebrada Majuelos B.
Description: CERAMIC SCATTER. This is a small ceramic scatter of utilitarian pottery. The sherds seem to belong to a single vessel with a braided handle. According to Proulx this a characteristic of Paracas utilitarian pottery.
Approximate Area: 5 x 5 m
Coordinates: S 14º 45' 23" W 75º 13' 05"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 765 686
Cultural Periods: Paracas.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escadillo
Date: February 15, 2000

QMA13

Location: This site is close to QMA01, on a natural platform next to a hill.
Description: CERAMIC SCATTER. The sherds seem to belong to a single vessel with round body,
Approximate Area: 4 x 4 m
Coordinates: S 14º 45' 07" W 75º 12' 07"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 782 677
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: February 17, 2000

QMB01

Location: This site ois on the west side of Quebrada Majuelos B, on a natural platform.
Description: CERAMIC SCATTER. This is a small sherd scatter. The geoglyphs og QMB02 are clearly visible from this site. Most sherds were in bad shape but some were identifiable as early Nasca.
Approximate Area: 5 x 3 m
Coordinates: S 14º 45' 31" W 75º 13' 01"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 765 684
Cultural Periods: At least one identifiable period: Early Intermediate
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: February 15, 2000

QMB02

Location: This site is close of the union of Quebrada Majuelos B to Quebrada Majuelos A.
Description: GEOGLYPHS and CERAMIC SCATTER. This is a large geoglyph group. Many lines and trapezoids meet at a small hill below QMB07 (it is a ray center). On one small pile of stones there was a broken, undecorated bowl with a ¾ cm thick wall (possibly Nasca).
Approximate Area: Covered area with geoglyphs: 750 m long by at least 250 m width
Coordinates: S 14º 45' 42" W 75º 12' 42"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 772 681
Cultural Periods: Early Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Aflredo Salas Diaz, Leonardo Rojas Escajadillo
Date: February 15 and 17, 2000

QMB03

Description: PETROGLYPHS. (See Appendix A)

QMB04

Location: The site is on the western side of Quebrda Majuelos B, on top of a hill.
Description: GEOGLYPH. There are four parallel lines, all oriented to the SW. All lines are approximately 25 m long and made with stones. They are between 8 m and 12.5 m apart.
Approximate Area: 60 x 40 m
Coordinates: S 14º 45' 18" W 75º 12' 46"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 771 688
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: February 16, 2000

QMB05

Location: It is on the same *quebrada* as QMB06, but further north.
Description: CERAMIC SCATTER. This is a large area covered with late Intermediate period ceramic sherds. There were no other cultural remains in the area, with the exception of a geoglyph made by aligning stones. The geoglyph is oriented to the Ne and measures about 15 m long.
Approximate Area: 500 x 150 m
Coordinates: S 14º 44' 58" W 75º 12' 30"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 776 694
Cultural Periods: Late Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: February 16, 2000

QMB06

Location: The site is located at the union of two small *quebradas*.
Description: GEOGLYPH. This is a geoglyph which consists of two parallel lines made by aligning river cobbles. The lines are about 930 m apart and measure approximately 31 m long. There were no sherds in the area.
Approximate Area: 31 x 9.30 m
Coordinates: S 14º 44' 59" W 75º 12' 03"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 784 694
Cultural Periods: Undetermined.

Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: February 16, 2000

QMB07

Location: This site is close to the union of Quebrada Majuelos A and B, on the north side of Quebrada Majuelos A and above QMB02. The geoglyph is on a stratum that contained a lot of fossils, especially shark teeth.
Description: GEOGLYPH. The geoglyph is made of two parallel lines, approximately 56 m long and 14 m apart. They are oriented in the direction of QMB02.
Approximate Area: 100 x 20 m
Coordinates: S 14º 45' 40" W 75º 12' 35"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 774 681
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: February 17, 2000

QMC01

Location: This site is next to the soccer field that is behind the school of Majuelos.
Description: CERAMIC SCATTER and GEOGLYPHS. There are several geoglyphs and a large number of sherds in the area. There is evidence of some looting. The geoglyphs are primarily lines made by piling stones.
Approximate Area: 100 x 200 m
Coordinates: S 14º 45' 48" W 75º 13' 12"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 762 678
Cultural Periods: Early Intermediate, Late Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 7, 2000

QMC02

Location: This site is on the south side of Quebrada Majuelos C, which ends near the school of Majuelos.
Description: CERAMIC SCATTER. This site consists of sherds of round bodied vessels with small handles. There was also a fragment of a ceramic figurine in poor shape. Some Late Intermediate sherds were also found higher on the hillside.
Approximate Area: 100 m wide
Coordinates: S 14º 45' 56" W 75º 13' 09"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 673 676

Cultural Periods: Late Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 7, 2000

QMC03

Location: This site is below QMC04.
Description: GEOGLYPH. There are two small geoglyphs, both made by aligning stones. One is a circle with a stone at the center. The other one is a grid-like form. These are similar to some geoglyphs in QMC13,
Approximate Area: 30 x 15 m
Coordinates: S 14º 45' 56" W 75º 13' 05"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 765 676
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 7, 2000

QMC04

Location: This site is located on the north side of Quebrada Majuelos C.
Description: GEOGLYPHS. These are geoglyphs made by an additive process of piling stones. Mostly, lines are paired. A set of lines seem to point to a small hill. Geoglyphs seem to continue all the way to the opposite side of the *quebrada*. There were no sherds in the area.
Approximate Area: 120 x 50 m
Coordinates: S 14º 46' 07" W 75º 12' 52"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 769 672
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 7, 2000

QMC05

Location: This site is on a natural platform on the south side of Quebrada Majuelos C.
Description: CERAMIC SCATTER. Most of the sherds at this location are Nasca, although some belong to the Middle Horizon.
Approximate Area: 200 x 70m
Coordinates: S 14º 46' 09" W 75º 12' 59"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 767 672
Cultural Periods: Late Intermediate, Middle Horizon.

Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 7 and 8, 2000

QMC06

Location: This site is on the upper portion of a hill on the south side of Quebrada Majuelos C. One can clearly see the geoglyphs of QMC07 and QMC04 from this location.
Description: CERAMIC SCATTER. This is a small sherd scatter Most of them are Nasca. There is also utilitarian ceramic sherds in the area.
Approximate Area: 15 x 15 m
Coordinates: S 14º 46' 12" W 75º 13' 03"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 766 671
Cultural Periods: Late Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 7 and 8, 2000

QMC07

Location: The site is at the base of Quebrada Majuelos C, close to the geoglyphs of QMC04.
Description: GEOGLYPH. A geoglyph made with parallel lines, oriented to the SW. IT is approximately 200 m long., and the lines are 10 m apart.
Approximate Area: 200 x 10 m
Coordinates: S 14º 46' 12" W 75º 12' 53"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 768 671
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 8, 2000

QMC08

Location: The site is on top of a hill on the south side of Quebrada Mauelos C, between this *quebrada* and the Nasca valley.
Description: CERAMIC SCATTER and SMALL STONE MOUNDS. There are three mounds made with stones and sherds scattered in the area. Most of the sherds are from utilitarian pottery, but one sherd was clearly Nasca.
Approximate Area: 60 x 90 m
Coordinates: S 14º 46' 18" W 75º 13' 01"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 766 668

Cultural Periods: At least one identifiable period: Early Intermediate.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 8, 2000

QMC09

Location: This site is on the uppermost portion of a hill on the south side of Quebrada Majuelos C.
Description: CERAMIC SCATTER. In a small area there were remains of a single vessel, approximately 25 cm in diameter at the shoulder. It was approximately 43 cm tall. The walls of the vase were about 1cm thick.
Approximate Area: 10 x 10 m
Coordinates: S 14º 46' 26" W 75º 12' 58"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 767 667
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 8, 2000

QMC10

Location: This site is on the south side of Quebrada Majuelos C.
Description: GEOGLYPH. This is primarily a *campo barrido* or *campo aclarado*. There are also stone mounds. There may have been lines at this location as well.
Approximate Area: 200 x 25 m
Coordinates: S 14º 46' 23" W 75º 12' 49"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 769 667
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 8, 2000

QMC11

Location: The site is in a small *quebrada* on the south side of Quebrada Majuelos C.
Description: GEOGLYPHS. These are two very small geoglyphs made by aligning stones. Stones have been very carefully placed next to each other. The geoglyphs of QMC03 and the *antara* and grid of QMC13 also use the same additive technique.
Approximate Area: 15 x 3 m
Coordinates: S 14º 46' 35" W 75º 12' 45"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 771 664
Cultural Periods: Undetermined.

Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 8, 2000

QMC12

Location: This site is on a natural platform on the south side of Quebrada Majuelos C.
Description: GEOGLYPHS.
Approximate Area: 100 x 70 m
Coordinates: S 12º 46' 31" W 75º 12' 47"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 771 665
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 8, 2000

QMC13

Location: This is a rather large site on the eastern end of Quebrada Majuelos C, close to the Nasca Pampa.
Description: GEOGLYPHS. This site consists of geoglyphs that continue from an area close to QMC12 up to the Nasca Pampa. Most of the geoglyphs are in poor condition and they are easier to see from the hillsides than the *quebrada* itself. Several geoglyphs involved *campos aclarados* or *campos barridos* or parallel lines. Two interesting geoglyphs consisted of images made by aligning stones. One clearly depicted an *antara* or pan flute. Another one consisted of a grid-like form with an attached zigzag made with the same technique.
Approximate Area: 2000 x 200 m
Coordinates: The site is between S 14º 46' 39" W 75º 12' 21" and S 14º 46' 45: W 75º 11' 50" in Quebrada Majuelos C
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 778 663
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo, Ruben Garcia
Date: March 8 and 9, 2000

QMC14

Description: PETROGLYPHS.(See Appendix A)

QMC15

Location: This site is located on a natural platform, close to QMA08.
Description: GEOGLYPHS. There are two geoglyphs. The main one is in poor shape and consists of two parallel lines oriented to the N. They are approximately 50 m long

and 5.50 m apart. There is a monkey figure done over this geoglyph, although it is impossible to tell how much later this geoglyph was made. It could be modern. There are two additional lines at a right angle.
Approximate Area: 100 x 50 m
Coordinates: S 14º 46' 21" W 75º 12' 38"
IGN Map: Edition 1-TPC Series J731 Sheet 1841II
UTM Coordinates: 773 668
Cultural Periods: Undetermined.
Documented by: Ana Nieves, Eulalia Ahon Zevallos, Alfredo Salas Diaz, Leonardo Rojas Escajadillo
Date: March 10, 2000

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